RAILROAD

MAGAZINE | APRIL 60 50c

A dramatic night repair job on the cab-signal receiving bar of a Pennsy sharknose diesel at the South Amboy, N. J., enginehouse.
Photo by Bud Rothaar

The Sydney & Louisburg Is Still 100 Percent Steam, by H. B. Jefferson

2-8-0 TYPE ENGINES
by H. L. KELSO

Streetcars on Display in U.S. and Canada

THE HAUNTED CABOOSE
by BILL KNAPKE

Mother India builds for the Diesel Age

Since 1949, India has pushed a widespread railroad improvement program.

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As a result, India has grown industrially. In the period between 1951 and 1959, freight traffic on Indian railroads has increased some 40% . . . from 98 million tons to about 138 million tons. And estimates indicate an even greater growth in the near future.

All of which means that India has recognized the railroads for what they are — the backbone of a modern, growing industrial society.

* * *

In the United States, by contrast, public policies tend to ignore this basic truth.

Here, the government appears indifferent to the strength and stability of the railroads, while it promotes and encourages the railroads' competition.

Railroads are burdened with over-regulation and discriminatory taxation — while their competition uses highways, waterways and airways built and maintained by the government.

* * *

The railroads ask no special favors. All they ask is the equality of treatment and opportunity fundamental to the American concept of free enterprise. Granted this, the public would then be *assured* of the efficient, low-cost rail service which a dynamic economy and national defense demand.

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Herb Smith was a payroll clerk. Soon after he started studying with us, he landed an art job with a large printing firm. This was four years ago; today he's head artist for the same firm.

Gertrude Vander Poel had never drawn a thing until she enrolled with us. Now a swank New York gallery sells her paintings.

Father of 3 Starts New Career

Stanley Bowen had three children to support and was trapped in a "no-future" job. By studying with us, at home in his spare time, he landed a good job as an advertising artist and has a wonderful future ahead.

Edward Cathony worked as an electrical tester, knew nothing about art except that he liked to draw. Two years after enrolling with us, he became Art and Production manager for a growing advertising agency.

With our training, Wanda Pickulski was able to give up her typing job and become the fashion artist for a local department store.

Earns Seven Times as Much

Eric Ericson worked in a garage while he studied nights with us. Today, he is a successful advertising illustrator, earns seven times as much and is having a new home built for his family.

Lee Ashby of Toronto writes: "I'm losing count but I believe I've painted 80 and sold 60 pictures since beginning your wonderful course."

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RAILROAD MAGAZINE

THE MAGAZINE OF ADVENTUROUS RAILROADING—FOUNDED 1906

VOL. 71, NO. 3 APRIL, 1960 50 CENTS

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Editor

SY REICH
Technical Editor

BERNARD WHITE
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BARBARA KREIMER
Information Booth

STEVE MAGUIRE
Transit Topics

ANNE WILLIAMS
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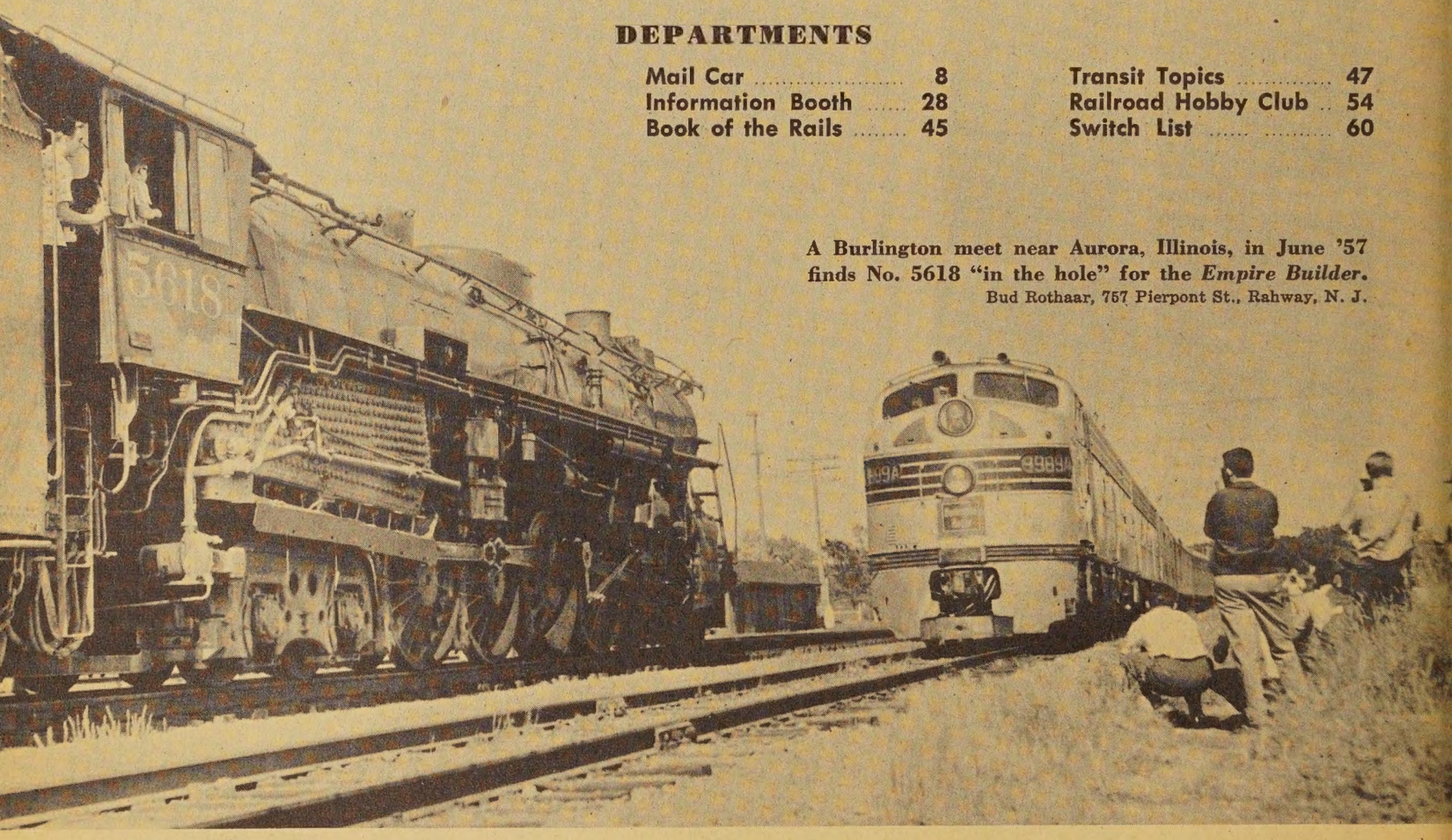

A Burlington meet near Aurora, Illinois, in June '57 finds No. 5618 "in the hole" for the *Empire Builder*.
Bud Rothaar, 757 Pierpont St., Rahway, N. J.

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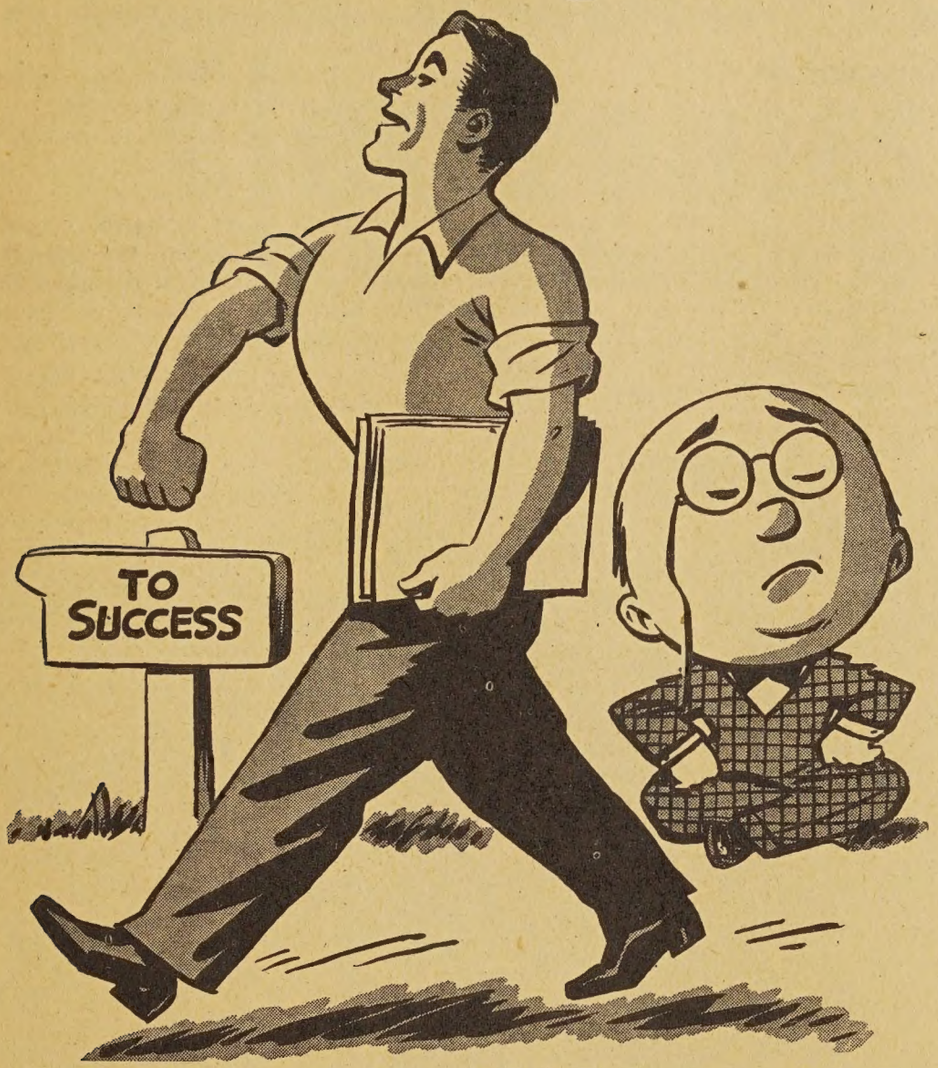
How to pass a genius



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They're Building Cagney STEAM LOCOMOTIVES Again

by FREEMAN HUBBARD

THIS is exciting news: *Cagney locomotives are being built in the United States!* Meet W. Andrew Morrison and Jay Wulfson, inheritors of the great Cagney tradition, present owners and operators of Eagle Locomotive Works. These two men are turning out real Cagney engines on order for amusement parks, plantations, logging, and other industries. Price for a steam engine with tender, $4,000.

The story began in 1892, when five Cagney brothers opened a locomotive-building plant at Niagara Falls, N. Y., which they later moved to Jersey City, N. J. They manufactured amusement-park trains, pulled by 4-4-0 steamers, in gages of 12⅝ and 15 inches, classes C and D respectively.

Also, until about 1905, they built steam locomotives for industrial use, mostly 0-4-0 tankers, any desired gage. Some were so light that they could run on 12-pound rail. Cylinder sizes ranged from 4x8 to 10x14 inches. Weight in working order varied from 3½ to 14 tons. Cagney engines were used in America and were exported to 31 foreign countries. Frederic Shaw has a chapter on them in his recent book, *Little Railways of the World,* published by Howell-North, Berkeley, Calif.

The Cagneys also manufactured giant swings and other large mechanical rides such as those used at Coney Island and elsewhere, and later gasoline-powered locomotives, some of which pulled trains at the 1939-'40 World's Fair in New York City. Cagney gas locomotives are still running on the pier at Keansburg, N. J., while Cagney Class D steam engines also are in service here and there throughout the country.

Just before World War II, Charles Cagney, a son of one of the founders, who had been carrying on the company, died and left it to his widow. Mrs. Cagney kept the original drawings and patterns for Class D's in the attic of her home at Island Heights, N. J.

She also owned a 15-inch-gage train with a Class D steamer at Seaside, N. J., and hired an old Cagney employe, Robert Parr, who had previously fired on the Jersey Central and the Susquehanna, to operate it. Bob had several machines from the Jersey City shops, which he housed in a shed in Atlantic Highlands, N. J. Besides working at Seaside, he made replacement parts for other people still using Cagney trains.

In 1947 Jay Wulfson came into the picture. Jay got a summer job running the locomotive at Seaside, lived in Mrs. Cagney's home that summer, and learned a lot of Cagney history. Later he founded a three-foot-gage operating museum, the Pine Creek Railroad, in Marlboro Township on U. S. Highway 9 four miles north of Freehold, N. J. This little line still runs occasionally.

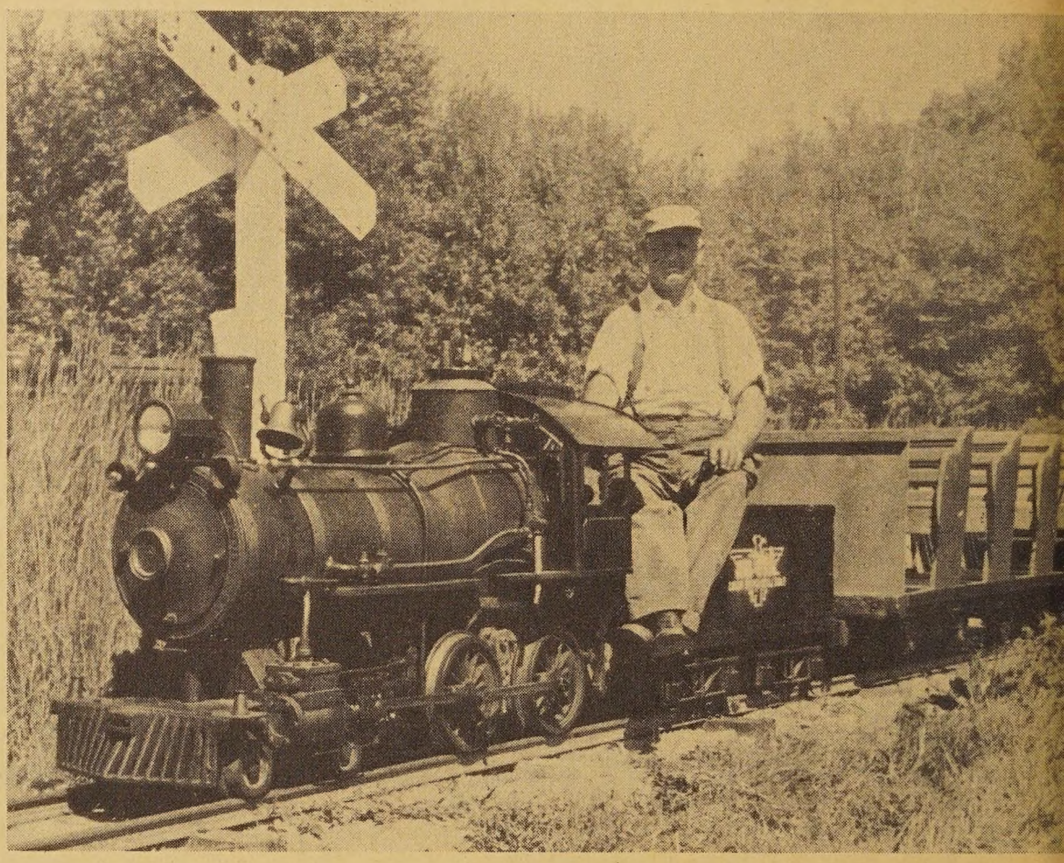
Mr. Morrison picks up the story at this point. "I met Jay and Bob in 1953, through the Pine Creek organization," he says, "while attending high school. Four years afterward Jay and a fellow named James Wright built a three-foot-gage railroad at Cowboy City in Farmingdale, N. J. It was very successful. I worked as conductor there during the summer of 1958, got a state engineer's license, and was promoted in 1959 to general manager and relief engineer.

"Recently Bob Parr moved the Seaside train and the Cagney machinery to the Pine Creek property, where they are today. Then Jay and I discussed the feasibility of building Cagney engines and putting them back on the market. Mrs. Cagney gave us exclusive rights to the Cagney name, drawings, and patterns. That put us in business.

"Although we will standardize our gages at 15 inches, 2 feet, and 3 feet, we are designing locomotives that, with little difficulty, can be built to any intermediate gage. Our tentative price list is: 15-inch-gage gas switching engine $1200, same gage Class D Cagney 4-4-0, $3500, and plantation loco, 2 or 3-foot gage, $8000. Orders should be sent to Jay Wulfson, 5 Water St., South River, N. J."

Two Class D steam locomotives are almost ready. Their running gear is finished; an industrial plant is making the boilers. Frames for two more Class D's have been started. Last December the shops, located on the Pine Creek property, completed a gasoline loco and sent her to an amusement park in Shamokin, Pa. There are four full-time workers, the latest being Peter Rasmussen, a Jersey Central veteran.

The Morrison-Wulfson trade name is Eagle Locomotive Works and it has another office at 283 Benefit St., Providence 3, R. I. If you want to see a real, honest-to-goodness, Cagney Class D engine wheeling a train, drop in at the Pine Creek setup any Sunday afternoon, weather permitting. ●



Bob Parr, one of the new Cagney loco builders, poses with a Class D, 15″ gage.
W. Andrew Morrison, Providence, R. I.

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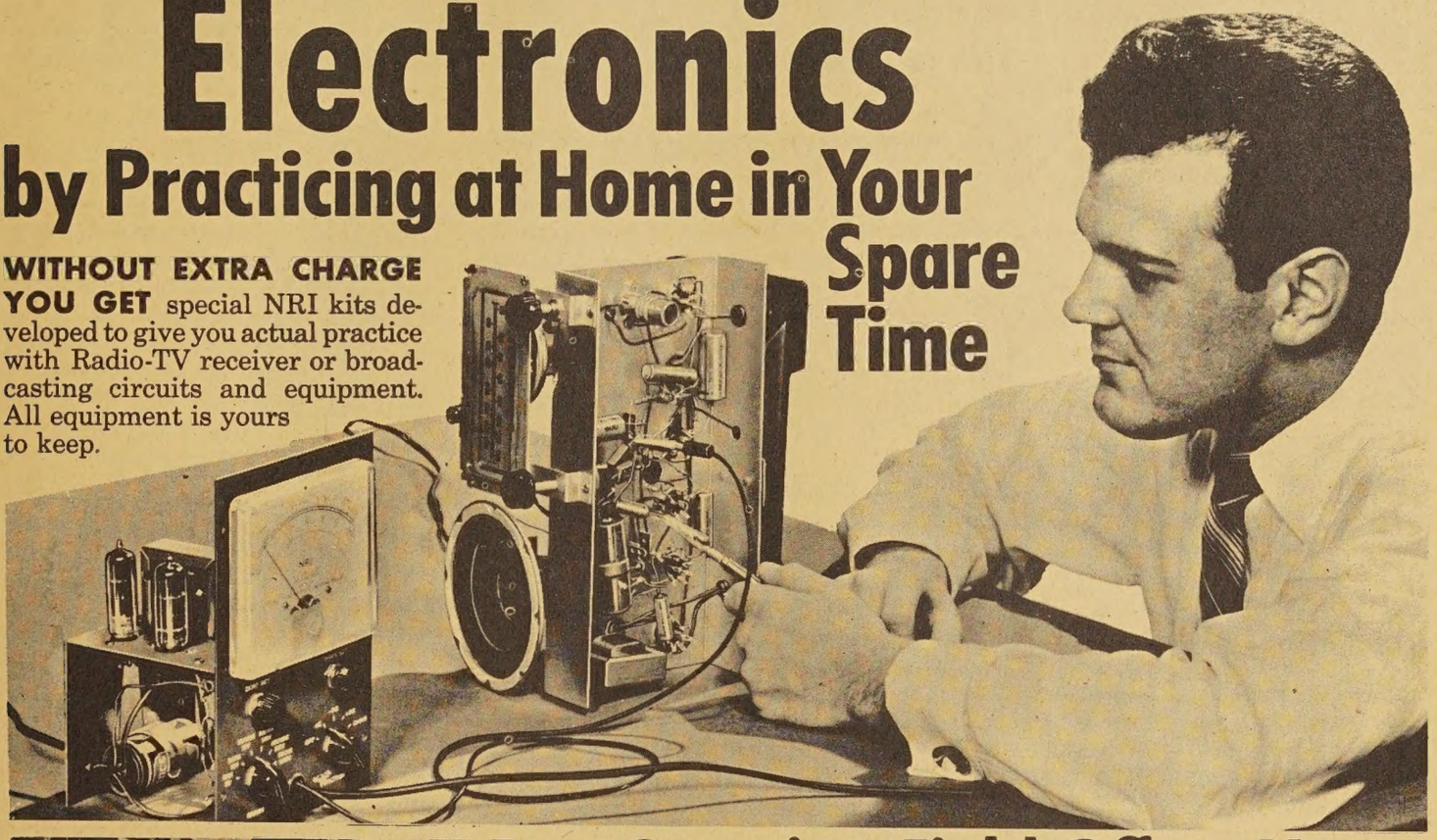

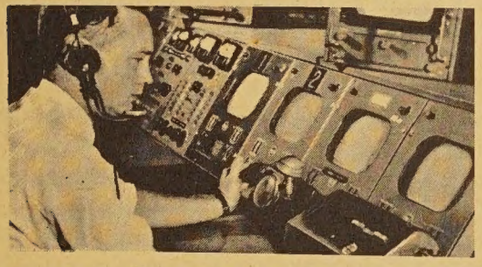

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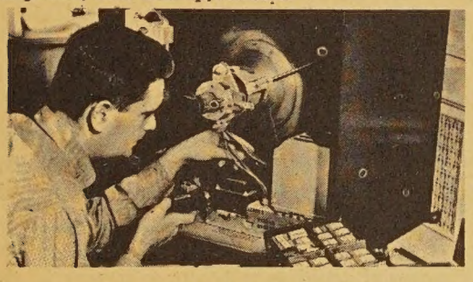

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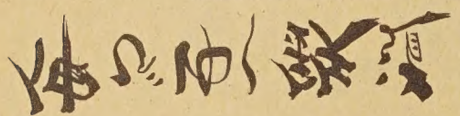


THE JAPANESE are being pushed to keep their electric trains on time. Shoving people through train doors is the job of 378 students hired part-time at 63 national railway stations in the Tokyo area. These streaks of varnish really operate on tight schedules. It costs money to run late. If an express train is more than one hour overdue at its destination, all passengers have their money refunded. Some American trains used to do that, but we don't know of any American train which does it today, except extra-fare trains. ●

LUCIUS BEEBE'S "Private Varnish on Shortlines" (Dec. '59) prompts Elliott Kahn, 50 E. 56th St., New York City, to state that a former Ringling Bros. Circus office car is now on the Louisiana Eastern. This 2-mile line also boasts an open-end observation-lounge-sleeper (ex-Milw. Road) and a lounge-observation car (Pullman) but no other passenger equipment.

"Beebe wrote that the Georgia & Florida had, until recent years, a private car of some elegance," says Carl V. Ehrke, Hotel Savoy, Kansas City, Mo. "It still does. I saw this car last fall at the Seaboard depot in Athens, Ga. It seemed to be freshly painted, Pullman green with gold lettering. The Seaboard operator said the occupants were G&F officials at a football game."

Carl adds: "There's a question in Dec. '59 *Information Booth*, 'Do know of a sleeping-car that regularly uses a different route going and coming?' Aside from the one Barbara Kreimer mentions, a through St. Louis-Shreveport, La., sleeper is southbound via Hope on the Louisiana & Arkansas and northbound via Texarkana on the Texas & Pacific."

The author of *Mansions on Rails* would be interested in this item: William Ginsburg, president of Rutland Ry., told a Vermont Public Service Commission hearing the other day that the railroad business was so bad that he couldn't afford to use his private car, even by hooking it onto a freight train for a short trip.

"If anyone wants to buy a president's car," he said, "I have one for sale." ●

CONTRADICTING Bill Blewett's statement (Dec. '59) that New York Central had 4-8-2's known by a name other than *Mountain*, Paul Cableck, 2549 California Ave., Dayton, O., adds: "Bill also said the IC's 4-8-2's were called *Centrals*. They were not. They were called *Mountains*."

How about it, Bill?

Another reader (whose name we can't decipher) says H. L. Kelso agrees with him that NYC, of all roads, had the greatest number of 2-8-2's.

Harry Chase asked if any 4-8-2 had a higher tractive effort than the New Haven's 3-cylindered locos. A reply comes from Phil Weibler, 711 W. Florida St., Urbana, Ill.:

"The IC's revamped 2500 series and its 2600's developed 96,000 pounds t.e. This is not only more than that of any Mountain type but surpasses even the 80,000-pound figure of Norfolk & Western's Class J 4-8-4's."

Phil adds: "I wish more space could have been given to Kelso's article on Mikados (Dec. '59), in addition to the IC's 2-8-2's that Kelso mentions, the Midwest had two other big fleets of Mikes. The Chicago & North Western's Class J started with No. 2300 when clear through the 2500 series and then picked up random numbers after that.

"The Omaha Road added classes J-2 and J-3 to the system's roster. Many J's were rebuilt with 63" drivers (61" was standard) to speed up freight schedules. These were the J-a's.

"Burlington Route started its 0-1 Class before World War 1, filled up the 5000 and 5100 series, then went back to the 4900's. Many 4900's are stored at various points. The 2-8-2 design was developed into classes 0-2, 3, and 4, series 5200-5500. All were big, heavy Mikes. 0-5 is Burlington's classification for 4-8-4's." ●

DID you know that a Catholic missionary to the Blackfeet Indians once served as president of the Canadian Pacific Railway? It's true, says Betty Woods, 301 Harvard Ave., Winnipeg, Canada, and here are the facts:

Father Lacombe

When the CPR was building a line through the Blackfeet reservation, the Indians resented it and angrily tore up the rails. Father Lacombe called a council and explained that the land which the "fiery horse" was taking from them would be made up by generous grants of other land. The redskins then agreed to let the railway build its line.

Later, the first train from Winnipeg roiled into Calgary. With it, on a private car, came President Wm. Van Horne and the CPR board of directors. Father Lacombe was a luncheon guest. At Van Horne's suggestion, the board elected the priest as CPR president because of his services to the company. Van Horne resigned, and was re-elected an hour later. During that hour Father Lacombe was legally president of the Canadian Pacific Railway. ●

BILL KNAPKE'S article on woodburners and David Marshall's "135,000 Reefers" (both in Feb.) remind Wm. D. Combs, P.O. Drawer 98, Venice, Ill., of Dr. John Gorrie, medical officer in charge of the U. S. Marine Hospital at Appalachicola, Fla., in 1883.

"Dr. Gorrie was trying to find some way to cool hospital rooms for the yellow-fever patients," Mr. Combs explains, "experimenting with a pump driven by a woodburning steam locomotive, when he accidentally made artificial ice and thus discovered the principle of mechanical refrigeration. His original ice machine now stands in the Smithsonian Institution at Washington, D. C." ●

THANKS, FELLOWS! A 3-year subscription to *Railroad Magazine* has been given to San Diego Public Library by the Railway Historical Society of San Diego, Inc., reports "Corky" Thomson, corresponding secretary, P.O. Box 9351, San Diego, Calif. The same group has persuaded Wm. Kingston, owner of *Whistle Stop*, a model railroad shop in

Top Doctors Answer The Question...

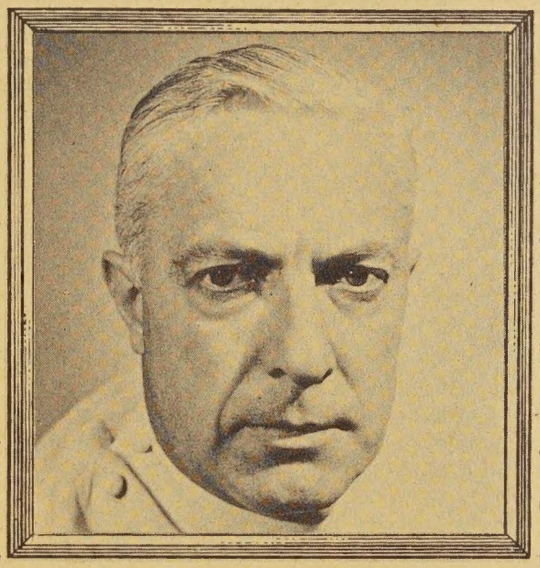
CAN YOU GROW HAIR?

If you are troubled by thinning hair, dandruff, itchy scalp, if you fear approaching baldness—read the rest of this statement carefully, since it may mean the difference to you between saving your hair and losing the rest of it to eventual baldness.

But first, let's understand a few facts about hair loss and baldness. Doctors, dermatologists, and top research men in the hair field are not always in complete agreement, but they do agree that there is no such nostrum as a hair grower. No chemical, no electric gadget, no formula can grow hair. What can be done is to stimulate more blood circulation to the scalp thereby supplying more nutrition to the hair follicles, and to keep the scalp healthy and germ free, thereby removing any outside impediment to normal hair growth.

Now, what can be done to prevent the progressive loss of hair? Doctors do not agree on the most significant cause of baldness. Certain facts do stand out, however, in spite of disagreement. There is little or nothing that you can do if your hair loss is hereditary in origin. Recognize the hard fact that if your hair loss is due to factors beyond scientific control, you are going to get bald no matter what you try. And a large body of dermatologists believes that heredity is the largest single factor causing the loss of hair.

That is the black side of the picture. But there is also a hopeful side. Another large group of dermatologists believes that seborrhea (a common scalp disorder) is a common cause of baldness, and that seborrhea should be controlled to prevent the hair loss it causes. The symptoms of seborrhea are easily recognizable. They are: dandruff, dry or oily scalp, scalp itch, head scales—and a progressive loss of hair.



HOW COMATE STOPS HAIR LOSS

A recently developed formula series called Comate effectively controls seborrhea, eliminates dandruff, stops scalp itch, corrects excessively dry or oily scalp, and effectively stops the hair loss caused by seborrhea.

We cannot and do not take sides in this medical controversy over which is a more significant cause of baldness, heredity or seborrhea. But we do know that we sold thousands of bottles of the Comate Formula Series on a money back guarantee, and less than 2% of our customers were dissatisfied with Comate and asked for and received their money back. We received hundreds and hundreds of letters acclaiming the wonderful performance of Comate not only in controlling seborrhea, but in effectively stopping hair loss. We are reprinting in this advertisement excerpts of some of these letters because they so effectively tell of the amazing performance of Comate.

HOW COMATE WORKS ON YOUR SCALP

This is how Comate works: (1) By its rubifacient action, it stimulates blood circulation to the scalp thereby supplying more nutrition to the hair follicles. (2) By its germicidal action, it kills scalp germs on contact, thereby eliminating an outside impediment to normal hair growth. (Comate's germ-killing properties have been proven in a series of scientific tests by a leading testing laboratory—copy of laboratory report on request). (3) Comate controls seborrhea, stops scalp itch. By its keratolitic action, it dissolves dried sebum, head scales, and ugly dandruff. Used as directed, it tends to normalize the secretions of your sebaceous glands, controlling excessive dryness or oiliness. A few treatments and your hair looks more beautiful, more vital and healthier. Today there is no longer any excuse for any man or woman to neglect the warning signals of impending baldness. Comate must help you or it doesn't cost you a penny.

COMATE IS UNCONDITIONALLY GUARANTEED

Now, here is our compelling offer. Try Comate in your own home. In only 10 days your hair must look thicker, more attractive and alive. Your dandruff must be gone, your scalp itch must stop. In only 20 days, you must see the remarkable improvement in your scalp condition and the continued improvement in the appearance of your hair. After 30 days you must be completely satisfied with the rapid progress in the condition of your hair and scalp, or return the unused portion of the treatment and we will refund the entire purchase price at once.

You now have the opportunity to increase the life expectancy of your hair at our risk. So don't wait. Delay may cost you your hair.

© COMATE Corporation, 20 W. 45th St., N. Y. C. 36 © 1958

MEN AND WOMEN COMMEND COMATE

These are a few of the unsolicited testimonials received every day from grateful men and women all over the country. Once you've tried Comate you'll rave about it, too!

"I used to comb out a handful of hair at a time. Now I only get 4-6 on my comb. The terrible itching has stopped."
—L. H. M., Los Angeles, Cal.

"My hair has improved. It used to fall out by handfuls. Comate stopped it from falling out." —D. M. H., Oklahoma City, Okla.

"My hair has quit falling out and getting thin."
—D. W. G., c/o FPO., N. Y.

"My husband has tried many treatments and spent a great deal of money on his scalp. Nothing helped until he started using your formula."
—Mrs. R. LeB, Piqua, Ohio

"Comate is successful in every way you mention. Used it only a few days and can see the big change in my scalp and hair."
—C. E. H., N. Richland, Wash.

"My hair was thin at the temples, and all over. Now it looks so much thicker, I can tell it."
—Miss C.T., San Angelo, Tex.

"Now my hair looks quite thick."
—F. J. K., Chicago, Ill.

"My hair had been coming out and breaking off for about 21 years and Comate has improved it so much."
—Mrs. J. E., Lisbon, Ga.

"I've used a good many different 'tonics.' But until I tried Comate, I had no results. Now I'm rid of dandruff, and itchy scalp. My hair looks thicker."
—G. E., Alberta, Canada

"Used it twice and my hair has already stopped falling."
—R. H., Corona, Cal.

"No trouble with dandruff since I started using it."
—L. W. W., Galveston, Tex.

"It really has improved my hair in one week, and I know what the result will be in three more. I am so happy over it, I had to write!"
—Mrs. H. J., McComb, Miss.

BALDNESS WON'T WAIT! ACT NOW!

COMATE CORPORATION, Dept. 3403-C
20 West 45th Street, New York 36, N. Y.

Please send at once the complete COMATE hair and scalp treatment (60 days' supply) in plain wrapper. I must be completely satisfied with the results of the treatment, or you GUARANTEE prompt and full refund upon return of unused portion of treatment.

☐ Enclosed find $10. (Cash, check, money order). Send postpaid.

☐ Send C.O.D. I will pay postman $10 plus postage charges on delivery.

Name_____

Address_____

City_____ Zone____ State_____

RUSH THIS NO-RISK COUPON TODAY!

that city, to sell this magazine regularly in his place of business. ●

TIMES HAVE CHANGED. This item appeared in the Bismarck, N. D., *Tribune* of Oct. 15, 1894: "The Northern Pacific has instructed its employes against taking an active part in politics."

One day last winter Southern Pacific cinder dicks in the Reno freight yards traced a long extension cord into a supposedly empty boxcar. It led to a hobo snoring under an electric blanket. They ousted him, blanket and all, and advised him to find a new plug-in.

Arthur Twohy of Los Angeles recalls that when he began work for the Illinois Central in 1903 as a messenger boy in the master mechanic's office at Waterloo, Iowa, he was paid six cents an hour, about $15 a month. Says he: "The pay-car made one trip a month over the entire system. We all went to it and got our wages in cash." ●

PRETTY SOFT. "In a shack in the railroad yards at Antigo, Wis., sat four railroadmen," says *Time* magazine, "a fireman, a conductor, a brakeman, and a flagman. All together, they collect pay totaling $110 a day, not counting fringe benefits. Their job: doing nothing. Earlier in the year, the Chicago & North Western decided to eliminate one of the two switching locomotives at Antigo because there was not enough work to keep them busy. But the road may not remove the idled crew without union permission, and permission had not been given."

Now read what A.H.F. of Mattoon, Ill., says in *Labor*, the weekly newspaper: "Anyone unconvinced that railmen really work should climb about a deafening diesel on a dark, cold night and see what it is to handle 150 cars with run-down equipment. And if the train makes an emergency stop, the conductor and brakeman a mile back in the caboose are sent sprawling to the floor. No featherbed for them." ●

THE "DUMMY" that Joe Easley pictured in *Along the Iron Pike* (Dec. '59) is identified by several readers. She carried passengers on the Fort Erie, Font Hill & Western RR. in Ontario, Canada, for about 3 miles between Fort Erie ferry dock and Fort Erie Beach amusement park, just across the swift Niagara River from Buffalo, N. Y.

"I often rode her," recalls R. F. James. "After a ferry ride from Buffalo we'd board the dummy with her saddle-tank engine and two cars."

The equipment came from New York Elevated lines, according to O. F. LaReau, 65 Grant St., Buffalo, quoting one of the engineers on that line, Mr. Bradley, a neighbor of his. That train had no air brakes. It was stopped by steam brakes on the engine. When Peace Bridge was built many years ago the Beach and the railroad folded.

"I remember seeing the dummy switch freight cars of supplies on the job of building that bridge," says Robt. K. Mason, 560 Central Ave., Holland, Mich. "She was so small and light alongside the standard cars that to stop them she just locked her wheels and slid." ●

NEWS IN BRIEF. A Presidential campaign train will run this year if certain influential Democrats have their way. These men object to electioneering by plane on two grounds: (1) Airport crowds, if they materialize, are small compared with the kind that turn out at railroad depots and (2) a candidate who flies over millions of voters misses a lot of people who should see him.

The last known survivor of the Casey Jones wreck, Bill Crittenden, 82, died in New Orleans last November. He was a passenger on the Illinois Central's *Cannonball Express*, with Casey at the throttle, April 30, 1900, when it hit a freight which had failed to enter a siding in time. Looking through broken train windows into the pre-dawn half-light, Bill watched four men carrying a cot. Casey's body was on that cot.

Ted Gay, Morris Plains, N. J., says he has put free entries in our *Switch List* and similarly-worded ads in *Trains* magazine (at 10¢ a word), and *Railroad* drew ten times as many replies.

Grand Central Terminal, New York City, will have as a next-door neighbor a 57-story octagonal structure with more floor space than any other commercial building on earth. This project, known as *Grand Central City*, will occupy the site of the present Grand Central Terminal Office Building of the New York Central Railroad. British capital has bought a half interest in it.

"I enjoyed David Plowden's pix of 5244, the last active PRR steamer (Dec. '59)," writes Emanuel Reider, 5719-B Park Ave., Philadelphia, Pa. "Saw her the other day in Pennsy's Parkside roundhouse. Number plate was gone but she seemed in perfect shape.

Jersey Central diesel locomotive No. 1706 mysteriously left a Jersey City yard at 10:30 p.m. recently and ran wild for 22 miles with nobody in the cab. At Perth Amboy, Engineer Chester Gudmunson jockeyed another diesel in front of the runaway and let it chase him. Then he kept reducing speed until the 1706 automatically coupled into his engine at 11:08 p.m.

Apr. 2 – Lackawanna fantrip, old main line, Boonton branch; lv. Hoboken ter. 10:45 a.m.; photo stops. Fare: $5 before Mar. 21, $6 thereafter. No half fare. Make out checks to Sheldon A. Kinbar, pres., RR. Club, Polytechnic Inst. of Bklyn., 333 Jay St., Brooklyn, N. Y. Enclose a stamped envelope.

Last year our technical editor, Sy Reich, rode behind and photographed steam locomotives in the U.S., Canada, England, Scotland, Wales, Isle of Man, France, Spain, Portugal, Monaco, Italy, West Germany, Denmark, Sweden, Norway, Holland, Belgium, Luxembourg. Can anyone match this record?

The Cotton Belt has just pulled off regular passenger runs, being the first major road to do so since Congress made it easier, in 1958, for such runs to be discontinued.

Ending of passenger service on New York Central's River Division, West Shore line, last December 10 threw 48 employes out of jobs. Years ago, the line carried 25,000 commuters a day and had 60 redcaps working in the once-proud Weehawken terminal, now deserted.

H. L. Kelso, an authority on steam types, will cover 2-10-2's in the near future. Will anyone who ever worked on a 2-10-2 send us an anecdote about her for use in Kelso's article?

The Rock Island and Milwaukee are tentatively considering a merger. If they merge, the new system will have more trackage than any other road in U. S.

The Portland, Ore., Zoo Railway, of which your editor, Freeman Hubbard, is one of the directors, now has a diesel streamliner, a steam train, a circus train, a mile of tracks, and a station, all on the Oregon Centennial Exposition grounds in Portland.

No more caboose rides for passengers on the Western Pacific's Keddie-Bieber freight line. In a five-year period the number carried over this route averaged 18 per year.

Milwaukee Road has cut its prices well below air-coach rates. A new thrift package includes rail passenger ride, all meals, and Pullman berths on the *Olympian Hiawatha* that runs between Chicago and Seattle-Tacoma. ●

SEAPORT TRADERS | SPORTSMAN'S BARGAIN CENTER

BEST BUYS OF ITEMS FAR AND WIDE AT PRICES YOU CAN EASILY AFFORD! GUARANTEED SATISFACTION. PROMPT DELIVERY

.22 6-SHOT REVOLVER $12.95

FIRES BOTH .22 SHORT & LONG AMMO. This sensational NEW 6-shot Rosco Vest Pocket .22 long revolver would be a tremendous value at 3 times its price. Made in W. Germany, it is a tight, well-made, exceedingly accurate handgun. Fires .22 Long & Short ammo. Features side gate loading, trigger adjustment, screw-in ejector rod. Has STEEL RIFLED BARREL with blade front sights. Terrific for target shooting, varmint hunting or home defense. Only $12.95. Gleaming nickel-plated model only $14.95. Leather holster $2.25.

ITALIAN POCKET AUTO. .25 CAL. — $19.95

Imported direct by us from Italy's finest gun manufacturer. Brand new! Trim, compact weapon fires powerful and easily obtainable .25 Cal. American made ammo. Also avail. calibers .22 long or .22 short . . . only $22.50. Have original factory blue finish. 6-shot capacity makes excellent plinking and home protection weapon. Fixed sights. Weight approx. 13 oz. Only $19.95. Holster $2.25. .25 cal. ammo box of 25 . . . $1.85

BRIGHT NICKELED S & W .38 SPECIAL 2" BBL. REVOLVERS $39.95

Made in U.S. by Smith & Wesson, these fine 6-shot revolvers with swing out cylinder are terrific buys. Fine cond. inside & out. Fixed sights, with rich nickel-plated finish and sharp STAC grips. Fires pop. American made .38 special S&W ammo. Only $39.95. Holster only $3.95. .38 Special ammo box of 25 . . . $1.85

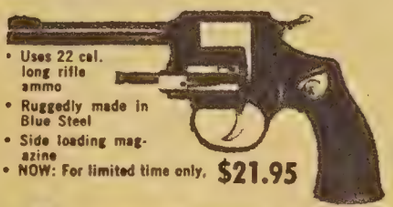
GENUINE MEXICAN LONGHORNS

These wild-eyed critters were introduced to the Americas back in 1521 at Vera Cruz, Mexico. Horns are hand-polished to a smooth-as-silk surface. Leather centerpiece is genuine hand-tooled cowhide. Choice of dark or light brown leather.

All sets are approximately 5 to 6 feet wide. Each set has its own individual markings yet appears approximately as set shown. Makes a wonderful conversation piece when placed above fireplace, mantel over bar or in den.

Sets between 5' and 6' $29.95

8 SHOT SWING OUT



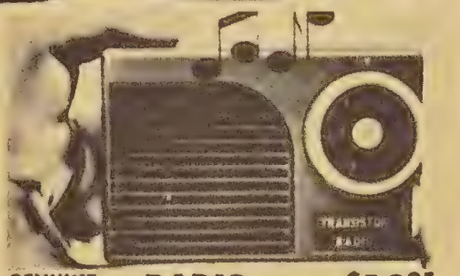
- Uses 22 cal. long rifle ammo
- Ruggedly made in Blue Steel
- Side loading magazine
- NOW: For limited time only, $21.95

SMITH & WESSON 1917 ARMY CAL. .45 ACP

Now, the world famous Smith & Wesson 1917 Army at a price all can afford. This hard-hitting Army stand-by in NRA Very Good condition $27.50

.22 DOUBLE DERRINGER ONLY $19.95

Imported from Europe. It is an exact copy of famous Remington Derringer popular in the late 1800's. Valuable collectors' item. Fine "old world" gun craftsmanship has been employed to give you a superior handgun & still retain all the features of the original Derringer. Accurate. Shoots .22 short, long or long rifle. Checkered black grips. Only $19.95. Sparkling chrome-plated model only $22.50. Western hand tooled holster $4.50. .38 Special nickel Derringer . . . $34.95



GENUINE TRANSISTOR RADIO . . . $12.95 ppd.

WITH SPEAKER! No wires or ear plugs to fool with. This pocket size radio plays loud & clear ANYWHERE —even in buses & streetcars. Ideal gift. Includes battery & carry case. (Reg. $24.95) NOW Only $12.95 ppd.

WEBLEY MK. VI .45 REVOLVER . . . $14.95

Latest model adopted by British Armed Forces, it is extremely accurate, has exceptional smooth action. Fires either as a single or a double action. Specs: Overall length 11¾", barrel 6", wt. 12 lbs. GOOD CONDITION. .45 Cal. $14.95. Holster $3.25. Specially selected like new—$17.95.

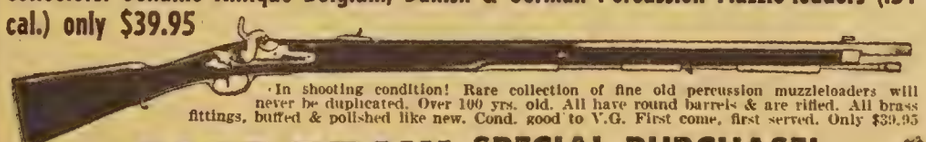
GUNSLINGERS! FRONTIER .22 only $19.95

Sensational new slide rod .22 shoots all three —long, short, and long rifle .22 ammo, double and single action. A tight, well-made piece. Looks like an old frontier revolver, acts like an old frontier revolver. Terrific gun for fast draw practice and plinking. Feels just right. Not $63, not $75.00, but only $19.95. Complete with fast draw holster $24.95.

4X SCOPE $9.95 (Mount Free)

Rugged, durable, dependable . . . and performs perfectly on ANY rifle. Extends shooting time from dawn to dusk. Distortion-free, color corrected. Lens hardcoated to U.S. Army standards. Easy to adjust windage and elevation. Easy to install. Weighs less than 10 oz. mounted. 4X scope and FREE mts. avail. for all rifles only $9.95.

Collectors! Genuine Antique Belgium, Danish & German Percussion Muzzle-loaders (.51 cal.) only $39.95



In shooting condition! Rare collection of fine old percussion muzzleloaders will never be duplicated. Over 100 yrs. old. All have round barrels & are rifled. All brass fittings, buffed & polished like new. Cond. good to V.G. First come, first served. Only $39.95

Sporting FAST DRAW HOLSTER

If you want to be an expert gun slinger and first to draw, then this is the holster for you. Expert leather craftsmen cut top grade saddle leather to your individual requirements, insuring a good fit, feel, and freedom of action. Reinforced and heavily stitched for a lifetime of thrilling fast draw feats. Give waist, hip measurement (choice of either .22, .38 or .24 calibers); make and barrel length. Available in black or saddle leather finish. Complete belt and holster (regularly $30.00) only $19.95. Lefty's add $2.00. Holster alone $7.50.

$19.95

SPECIAL PURCHASE! WINCHESTER .22 only $9.95

BARGAIN OF A LIFETIME!

This Winchester Model 67 bolt action single shot rifle features: 27" round, tapered proof marked barrel, crowned at muzzle. Winch. 75C front & 32B sporting rear sights & short compact bolt with pear shaped bolt handle. Military safety lock. Am. walnut sporting type pistol grip stock with semi-beavertail fore-end, automatic ejector. Wt. approx. 5 lbs. Shoots .22 shorts, longs & L.R. ammo. Good inside & out. Only $9.95. Special .22 Winch. 4X scope & mt. only $15.95.

.22 SCOPE & AMMO BARGAIN

4X scope & FREE mount for all popular .22 rifles only $8.95. 100 rds. .22 short FRENCH ball ammo. $1.

MAIL COUPON

SEAPORT TRADERS, INC. 1221 S. Grand Ave., Dept. AM-4 L.A. 57, Cal.

Gentlemen: Please rush me the following:

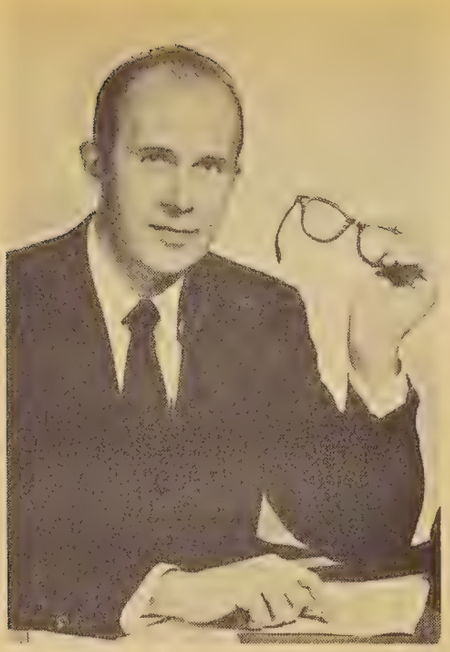
Quantity	Product	Cost per Item	Total
	.22 6-shot Revol. (blue)	$12.95	
	.22 6-shot Revol. (Nickeled)	14.95	
	8-shot Swingout	21.95	
	.45 S.W. Revolver	27.50	
	Webley Mk. VI .45	14.95	
	Fast Draw Holster & Belt	19.95	
	Fast Draw (Holster only)	7.50	
	Ital. .25 Auto	19.95	
	Ital. .22 Long	22.50	
	Ital. .22 Short	22.50	
	Perc. Muzzleloaders	39.95	
	Mexican Longhorns	29.95	
	.22 Derringer (blue)	19.95	
	.22 Derringer (Chrome)	22.50	
	Derringer W. Holster	4.50	
	Frontier .22	19.95	
	.22 Winch. Rifle	9.95	
	.22 Winch., Scope & Mt.	15.95	
	.38 S. & W. Spec. (nickel)	39.95	
	Transistor Radio	12.95	
	.45 Colt Auto. (nickel)	49.95	
	.22 Ball Ammo (100 rds.)	1.00	
	.22 4X Scope & Mt.	8.95	
	4X Scope (Mt. Free)	9.95	
	TOTAL PRICE		

Enclosed _____ cash, _____ check or _____ M.O. (COD's require ¼ deposit.) (Be sure to specify & give complete ordering info.) I understand all items are to be shipped FOB L.A., express charges collect. Calif. res. add 4% state tax. *For fast service when ordering pistols, please sign statement: "I am not an alien, have never been convicted of a crime of violence, am not under indictment or a fugitive. I am 18 years or over."*

NAME _____
(please sign)

ADDRESS _____

CITY _____ STATE _____



"It's easy," says Don Bolander...

"and you don't have to go back to school!"

How to Speak and Write Like a College Graduate

"Do you avoid the use of certain words even though you know perfectly well what they mean? Have you ever been embarrassed in front of friends or the people you work with, because you pronounced a word incorrectly? Are you sometimes unsure of yourself in a conversation with new acquaintances? Do you have difficulty writing a good letter or putting your true thoughts down on paper?

"If so, then you're a victim of *crippled English,*" says Don Bolander, Director of Career Institute. "Crippled English is a handicap suffered by countless numbers of intelligent, adult men and women. Quite often they are held back in their jobs and their social lives because of their English. And yet, for one reason or another, it is impossible for these people to go back to school."

Is there any way, without going back to school, to overcome this handicap? Don Bolander says, "Yes!" With degrees from the University of Chicago and Northwestern University, Bolander is an authority on adult education. During the past eight years he has helped thousands of men and women stop making mistakes in English, increase their vocabularies, improve their writing, and become interesting conversationalists *right in their own homes.*

BOLANDER TELLS HOW IT CAN BE DONE

During a recent interview, Bolander said, "You don't have to go back to school in order to speak and write like a college graduate. You can gain the ability quickly and easily in the privacy of your own home through the Career Institute Method." In his answers to the following questions, Bolander tells how it can be done.

Question *What is so important about a person's ability to speak and write?*

Answer People judge you by the way you speak and write. Poor English weakens your self-confidence — handicaps you in your dealings with other people. Good English is absolutely necessary for getting ahead in business and social life. You can't express your ideas fully or reveal your true personality without a sure command of good English.

Question *What do you mean by a "command of English"?*

Answer A command of English means you can express yourself clearly and easily without fear of embarrassment or making mistakes. It means you can write well, carry on a good conversation — also read rapidly and remember what you read. Good English can help you throw off self-doubts that may be holding you back.

Question *But isn't it necessary for a person to go to school in order to gain a command of good English?*

Answer No, not any more. You can gain the ability to speak and write like a college graduate right in your own home — in only a few minutes each day.

Question *Is this something new?*

Answer Career Institute of Chicago has been helping people for many years. The Career Institute Method quickly shows you how to stop making embarrassing mistakes, enlarge your vocabulary, develop your writing ability, discover the "secrets" of interesting conversation.

Question *Does it really work?*

Answer Yes, beyond question. In my files there are thousands of letters, case histories and testimonials from people who have used the Career Institute Method to achieve amazing success in their business and personal lives.

Question *Who are some of these people?*

Answer Almost anyone you can think of. The Career Institute Method is used by men and women of all ages. Some have attended college, others high school, and others only grade school. The method is used by business men and women, typists and secretaries, teachers, industrial workers, clerks, ministers and public speakers, housewives, sales people, accountants, foremen, writers, foreign-born citizens, government and military personnel, retired people, and many others.

Question *How long does it take for a person to gain the ability to speak and write like a college graduate, using the Career Institute Method?*

Answer In some cases people take only a few weeks to gain a command of good English. Others take longer. It is up to you to set your own pace. In as little time as 15 minutes a day, you will see quick results.

Question *How may a person find out more about the Career Institute Method?*

Answer I will gladly mail a free 32-page booklet to anyone who is interested.

MAIL COUPON FOR FREE BOOKLET

If you would like a free copy of the 32-page booklet, How to Gain a Command of Good English, *just mail the coupon below. The booklet explains how the Career Institute Method works and how you can gain the ability to speak and write like a college graduate quickly and enjoyably at home. Send the coupon or a post card today. The booklet will be mailed to you promptly.*

DON BOLANDER, Career Institute, Dept. E-104, 30 East Adams, Chicago 3, Ill.

Please mail me a free copy of your 32-page booklet.

NAME_____

STREET_____

CITY_____ ZONE_____ STATE_____

Photos of the Month

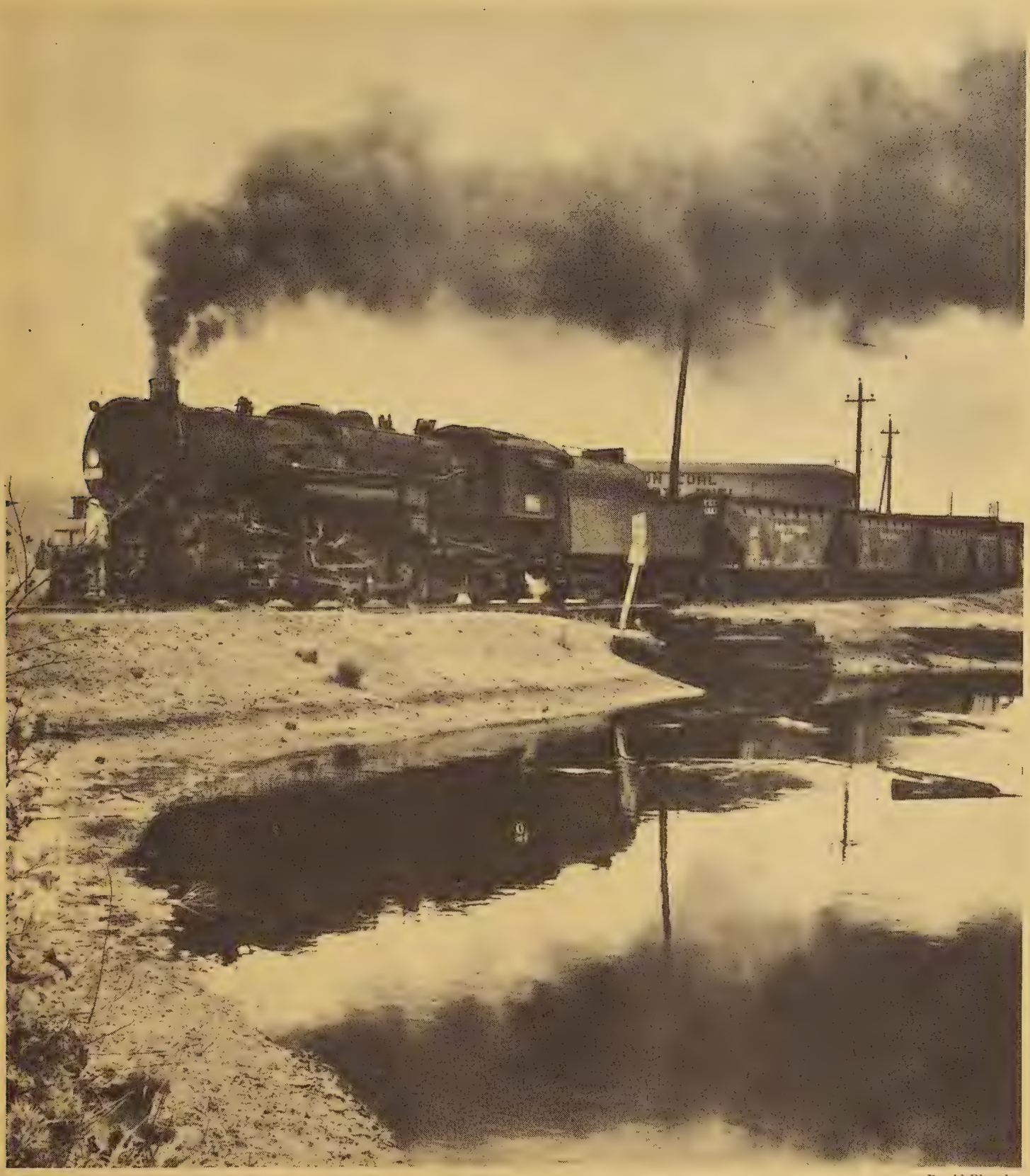
David Plowden, 1239 Madison Ave., New York City

Today, the biggest all-steam road on our hemisphere is the Sydney & Louisburg of Nova Scotia (see page 16). Looking through a coal-washing screen in North Sydney engine terminal, we see two S&L 0-8-0's, both built by Schenectady Locomotive Works: No. 32 (left), built in 1891 for Detroit-Toledo Shore Line, and No. 31, Pittsburgh & Lake Erie veteran, 1890.

Lone passenger on the S&L mixed train is leaving the ancient coach at Mira Gut, N.S. Note that the engine runs backward to Louisburg because the system's only turntable is at Glace Bay.

Both photographs by David Plowden

S&L engine takes water at Caledonia (Glace Bay), N.S., before going out on a mine run.



David Plowden

Reflected in the water is S&L No. 106, a former New York Central 2-8-2, with 25 cars of coal from the North Sydney washing plant, heading into Sydney Junction on Canadian National track and with a CNR crew. The coal, when cleaned, will be shipped out of Sydney.

S&L train bound for Sydney over short stretch of Canadian National rails, the only steam-operated CNR track left in East.

The Story of the 39-Mile Sydney & Louisburg Railway in Nova Scotia

by H. B. JEFFERSON

Present-Day Photographs by David Plowden

There is a land of pure delight
Where hand-fired steam still reigns,
Where mighty Mikes roar day and night,
And Moguls haul mixed trains.

HAVE you been kicking yourself for not getting better photos of live steam engines while they were still available? Lamenting because there were no more steam worlds to conquer? Then cease repining. There still exists a marvelous Last Chance picture bonanza that takes you back into the 1890's.

Five hours from New York or four from Boston or Montreal will put you into Sydney, Nova Scotia, the Steel City of Canada, "Down Where the East Begins." From there it is only 18 miles by highway to Glace Bay, headquarters of the Sydney & Louisburg, the last all-steam road of its size in North America.

This is no toy tourist pike, but a busy coal line 39 miles long that handles more tonnage per mile of main track than any other railway in Canada, not excluding the mighty Canadian National and Canadian Pacific! It is owned

Fairlie double-ender, built in 1872 by Avonside Engine Company, Bristol, England, for Glasgow & Cape Breton Ry. (now part of Sydney & Louisburg).
Drawn by Joe Easley from photo in author's collection

by the Dominion Coal & Steel, Canada's greatest industrial corporation.

S&L has twelve powerful Mikados for road service, a dozen 0-8-0 switchers working around the collieries, and seven other engines of various types and sizes, one of which has been on the job continuously since 1891. Altogether, 31 locomotives.

The road has a total trackage of 108 miles, all laid with 100-pound steel. It employs some 400 railroaders, most of whom belong to the standard brotherhoods. Its trackmen, however, are in the United Mine Workers.

As you drive in on Reserve Road you come to a wide-open gate. No guard asks for passes nor growls, "Whadda *you* want?" One step through that gate and you are in a steam fan's paradise.

Around you are locomotives of various sizes and types, open-platform wooden passenger cars, curious long box cars with high windows and rough seats for carrying miners to the pits, and dismounted tenders turned on side to save space. There is even a jumbo crane that helped to build the almost-legendary Chignecto Ship Railway 85 years ago and is still working.

You are in the midst of all the interesting, nostalgic stuff that an engine terminal has accumulated in nearly a century of steam railroading. Coal rumbles down chutes, firemen manipulate tank spouts on tender tops, smoke drifts lazily from a dozen stacks, turntables rumble, and iron horses chuff in and out, amid the oldtime mixed smells of hot oil, exhaust steam, and burning soft coal.

Originally the roundhouse was circular but from time to time, as engines grew in size, it spread out until now it is a combination of roundhouse and engine sheds. It reminds you of a giant irregular horseshoe with the conventional turntable opening near the heel.

Once a year, when the coal miners are on vacation, the whole S&L motive power fleet is concentrated in that area. At other times about ten engines are kept at Sydney, which has a smaller terminal.

North of the Bay roundhouse you see the foundry and machine and car shops. Near them are the 20,000-gallon, wooden-shingled water tank, with its coolie-hat-shaped top, and a coal plant from which fuel is discharged by one-ton boxes into waiting tenders.

Down the track a piece is Glace Bay station, which also houses the general offices. Fifteen miles west lie International Piers, where 12,000-ton colliers load around the clock, and 24 miles in the opposite direction is Louisburg, the other end of the railway. Practically all of the company's 4,250,000-ton annual traffic flows exclusively over the 20 miles of northwestern lines between Glace Bay, New Waterford, and Sydney.

Eleven miles west of the Bay you come to Victoria Junction, from which a seven-mile branch leads to Waterford. All engines and trains receive terminal clearance at the Junction daily except Sunday.

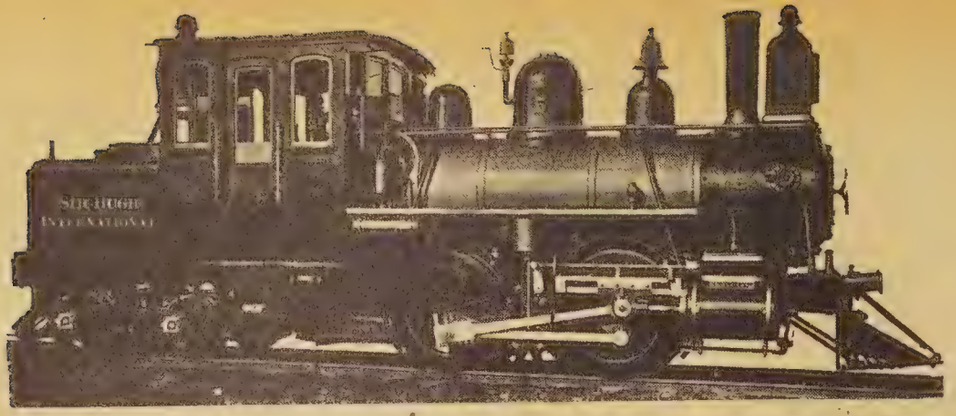
A mile and a half farther west is the main assembly yard, and a mile beyond that is Sydney Junction, from which lines radiate to the engine terminal, Sydney steel plant, Canadian National yards, and International Piers.

When a coal train stops at the pier entrance, its Mikado is cut off and sent down a ramp to a water standpipe near shore level. A lightweight switcher then detaches the caboose and pushes the train onto the high pier. There the leading car is uncoupled and maneuvered by tractors into a tilting machine which dumps the contents down a chute into a steamship's hold.

After the car has been righted, a drop-table delivers it to the next lower wharf level, whence it runs by gravity down another ramp to the vicinity of the locomotive watering below. Very soon the last car rolls down to the train, a caboose is coupled on, and away they go, tender-first, back to the mines for another load.

Water and coaling facilities are avail-

One of many jobs at the Glace Bay engine terminal is to clean the ash pit.



Bell was mounted on sand dome of *Sir Hugh* (Allen), one of the 2 Forney engines on International Ry., named for first Canadian Pacific president.
Collection of H. B. Jefferson, Information Bureau, Provincial Bldg., Halifax, N.S., Canada

able at Sydney, Waterford, O'Neil's Point, Caledonia Junction, and Victoria Junction. The Sydney & Louisburg has a traffic arrangement over 17 miles of Canadian National main line between Sydney and Sydney Mines whereby it uses its own engines and trains but CNR crews. Two Mikados handle those runs—the last live steam on the Canadian National east of Montreal.

The Louisburg line is quite scenic, especially around Mira Bridge and Catalone Lake. Twice every day except Saturday and Sunday a mixed train, pulled by one of three Moguls, operates between the Bay and Louisburg. The Moguls are Nos. 45, 15, and 82.

No. 45 is a former 2-6-4T, rebuilt in 1949. She weighs 118 tons, has 19x26-inch cylinders, 200 pounds pressure, and a drawbar pull of 29,000 pounds.

The other two, Nos. 15 (built in 1911) and 82 (built in 1928) are identical except that the former weighs 116 tons and the latter 128 tons. Each carries 200 pounds pressure, has 19x26-inch cylinders, and, with 50-inch drivers, has a drag of 28,750 pounds.

But passenger service won't last much longer. The S&L has tentatively agreed to sell one of its old open-platform coaches to Chadwell O'Connor, a railfan of Alta Loma, California, who will ship it home via the Panama Canal.

The road's president, A. L. Fairley, also heads the parent company, Dominion Steel & Coal. Alex MacDonald is superintendent of the S&L and R. J. Woodford is chief dispatcher. Morse telegraphy is used to dispatch trains between Sydney and the Bay but not on the Waterford branch.

Rolling stock consists mainly of 65-ton hoppers, each built to carry 50 tons of Cape Breton bituminous coal. The road has about 1,200 steel cars. J. G. Fisher, veteran superintendent of motive power, presides over modern shops that handle heavy repairs and have rebuilt scores of locomotives.

S&L motive power history takes in much American territory east of the Mississippi and into the Deep South. The mellow whistle tones that once floated across the canebrakes and bayous of Louisiana, the Cajun country, are likely to be the last to echo through the rugged hills of Nova Scotia, where the Cajuns originated and where thousands of descendants of those who escaped deportation in 1776 reside to this day.

For switching on Sydney piers and in other spots where light weight is desirable the road has two Rhode Island 2-6-4T Forneys, both rebuilt as Moguls. No. 31, formerly the *Henry M. Whitney* (1893), was originally the *Sir Donald* and then the *Louisburg*.

Among the light engines are two identical 0-6-0 Montreal switchers, built in 1927. Like No. 82, they have 19x26-inch cylinders, with 50-inch drivers, and 200 pounds of steam, and with 182 tons on the hoof they pack a drawbar pull of 40,000 pounds.

This completes the list of surviving locomotives built expressly for the S&L in the days before it adopted the policy of buying heavier power abroad. The other engines now in use arrived from various sources, mostly from the United States.

From the Tennessee, Alabama & Georgia, by way of the New Orleans, Mobile & Chicago, came Mikes 73, 74, and 76, all built by Baldwin in 1912. The Nova Scotia road bought the first two in 1937 and No. 76 in 1938. Their TA&G numbers were 205, 202, and 204, and their NOM&C numbers 104, 101, and 103.

All three have 22x28-inch cylinders and 57-inch drivers, carry 200 pounds pressure, and weigh 172 tons, with a tractive effort of 40,000 pounds. They were given new boilers in 1943, 1942, and 1944 respectively.

The Detroit & Toledo Shore Line contributed its 26, 25, and 32, which the Sydney & Louisburg has numbered Nos. 103, 104, and 105. Baldwin built the first two in 1928, and Lima the third in 1936, but their general specifications are the same: cylinders 26x30-inches, drivers 63 inches, boiler pressure 200 pounds, weight 261 tons, and tractive effort 54,700 pounds.

We now come to No. 77. Built by Baldwin in 1918, she showed up in 1941 from the Cambria & Indiana, where she had been No. 10. In 1950 she was given a new boiler. She weighs 190 tons and, with 22x28-inch cylinders, 57-inch drivers, and 200 pounds of steam, has a drawbar pull of 41,000 pounds.

The sturdy old 101 came from the Chicago & Eastern Illinois in 1950. Built by Brooks in 1922, she is the most powerful of the S&L fleet. Her tractive effort of 60,000 pounds derives from 63-inch drivers and she is propelled by 200 pounds of steam acting on 28x30-inch cylinders. Weight, 255 tons.

The S&L's heaviest engine, No. 102, a Schenectady of 1918 vintage, was bought in 1951 from the Chesapeake & Ohio on which she was numbered 2376. Before that she was Pere Marquette 1037, ex-New York Central 5113. Dimensions: 27x30, 63 inches, 200 pounds, 311 tons, and 54,700 pounds of drawbar pull.

A boomer Mikado is No. 106, with the longest pedigree of any S&L engine. Brooks built her in 1913 for the Lake Shore & Michigan Southern. Since then she has been Cumberland Railway & Coal 2051, New York Central 2051, Michigan Central 7951, NYC 4001, and LS&MS 4001. Her 22x28 cylinders, 51-inch drivers, 200 pounds of steam, and 164 tons of weight deliver a drawbar pull of 45,000 pounds.

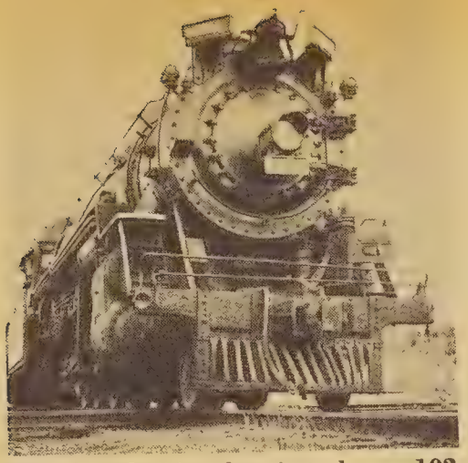
The S&L acquired eight 0-8-0 switchers from the Pittsburgh & Lake Erie. These are typified by No. 88, built by Lima in 1937, with 25x28 cylinders, 52-inch drivers, 200 pounds of steam, 223 tons of weight, and tractive effort 54,000. This class includes (P&LE numbers in brackets): Limas: 88 (8042), 89 (8031), 90 (8011), 91 (8029), 92 (8040) and Alcos 93 (9074), 94 (8061) and 95 (8064).

Of the other four 0-8-0's, two were bought from the Detroit & Toledo Shore Line on which they were 106 and 110 respectively. They are now numbered 84 and 86. Number 84 is a 164-ton veteran built by Schenectady in 1918, with 24x28 cylinders, 51-inch drivers, and a drawbar pull of 45,000. No. 86 is identical except for weight, 172 tons, and drawbar pull, 45,200.

No. 85 was built by Lima in 1926 as

Engine 71 pulls mixed train with solitary coach from one end of line and pushes it back to other end. Our camera man is the only passenger on this particular run. The conductor steps outside to see if there is any business for him at Louisburg.

Sydney engine terminal, showing locomotives 31, 15, and 103 and (at left) ore stockpile of Dominion Coal & Steel Company



S&L bought its heaviest loco, 102, from the Chesapeake & Ohio in 1951.

Wabash 1561, with 51-inch wheels and 25x28 cylinders. At 223 tons her drawbar pull is 55,000, second highest on the road.

No. 87 came in 1952 from the Chicago & Illinois Midland (No. 546), which got her from the Manufacturers Railway of St. Louis (No. 102), for which Baldwin had built her in 1929. Cylinders 25x28, 52-inch drivers, 217 tons. All four engines carry 200 pounds pressure.

Only seven of the Sydney & Louisburg's 31 locomotives are stoker-equipped. All the rest are hand-fired.

The road's present charter dates from only 1910, but component operations go back to 1866, and its early legislative history has roots in the American Civil War, when much Cape Breton coal was used in New England.

To serve a group of seaboard mines, each with its own little steam tramway, American capital in 1872 built the 12-mile standard-gage International Railway from Bridgeport to International Piers at the north end of Sydney. In that same year British capital completed a three-foot-gage coal line, the Glasgow & Cape Breton, from Reserve Mines 12 miles to another Sydney pier.

Two years later the Glasgow line merged with two other coal companies, becoming the Cape Breton Company, Ltd., and in 1877 pushed trackage 22 miles from Norway Junction (Reserve) to Louisburg. This outfit originated the idea of using its numerous snowsheds to store coal in winter for spring shipment.

In 1881 the Cape Breton Company was reorganized as the Sydney & Louisburg Coal & Railway Company, and operated the rail line until forest fires destroyed parts of it in 1883.

It was a rickety road. In 1888 its 32 miles included 32 wooden trestles and 35 large wooden culverts. One brook was crossed five times on trestles in a few hundred yards!

Motive power included three English Fairlie double-enders and a small yard goat. Each Fairlie consisted of two 4-4-0 engines placed back to back under one long boiler, with a stack at either end, a single firebox, and a cab in the center. They could run with equal facility in either direction, needing no turntable or wye.

The International had three conventional standard-gage engines. Two were handsome Rhode Island Forneys, a 2-6-4T named *Sir Donald* and a 0-4-4T, *Sir Hugh*, both built in 1891. The former was renamed *Louisburg*. It is still in service as No. 32.

In 1893 a Boston financier, Henry M. Whitney, merged all of the important Cape Breton mines and their railways into what is now Dominion Steel & Coal. Included were the old S&L and the International. A third rail was installed temporarily to enable the Fairlies to haul standard-gage cars.

When completed in 1895, the S&L was quite modern, with 80-pound steel rail and Rhode Island motive power. Some earlier engines were retained as switchers. Passenger traffic zoomed rapidly but around 1916 it began dwindling under motor competition.

The road has had only two sizeable fatal wrecks. Back in 1903 a work train collided with a coal special, killing three men and injuring eleven. The same year a coal train approaching Mira Bridge lost its air, and the engine and several cars went through the open draw into the river, drowning Engineer William Parsons. The fireman, Charles Dickson, saved himself by a fast leap and timely grab at a girder. He lived to become assistant superintendent of the road.

An unusual fatality occurred in 1907: the *Louisburg* (now No. 32) blew the top off her steam dome, killing a machinist. Also in 1907, on the same engine, two men were hurt when mine-blasting powder that had been left carelessly on a coal pile exploded in the firebox.

At one time summer was the busy season, and winter very slack. But federal grants on coal freights inland have tended to even up the haulage. The four-mile stretch between Victoria Junction and the piers now averages at least one long coal train an hour. Sydney Junction is the best locality for action pix, with engines laboring hard to haul empties uphill from the harbor. Incidentally, the road's steepest grade is 1.75 per cent on the Louisburg run.

How long the S&L will continue in steam is matter of opinion. Some officials think not more than four or five years. Already the shops have had to fabricate spare engine parts no longer obtainable from Kingston or Montreal. There is a boiler factory at Amherst, Nova Scotia, but its output is too small for Mikados.

A more immediate threat is the precarious state of the coal industry itself. Right now Ottawa and Halifax are in vital negotiation trying to stop or delay the closing of three big mines employing 2,500 men.

So railfans interested in steam action pictures and steam recordings had better not wait too long to visit Nova Scotia. ●

Engine 101 (2-8-2 type) in Sydney assembly yard. Crew ride pilot beam on most runs because there is so much on-line switching. Note the perforated metal flags.

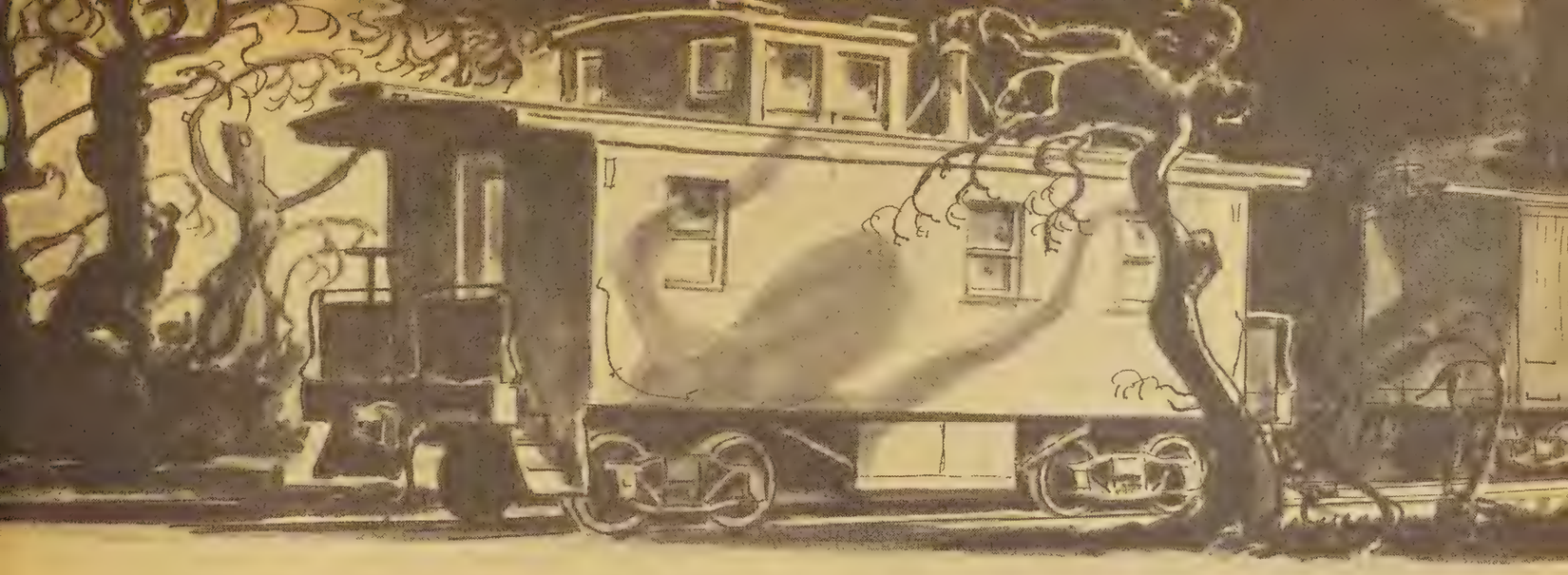


Illustration by Joe Easley

THE HAUNTED CABOOSE

by Bill Knapke

LATE one afternoon, years ago, I was walking down a dim hallway in the Southern Pacific office building at Los Angeles, past an open door, when a familiar voice hailed me, "Oh, Bill!" I looked in at B. W. Mitchell, superintendent of the L.A. Division, a rugged man with gray streaks in his black hair. He was seated alone at his desk staring absent-mindedly at a pencil that he held upright.

"Got a minute?" he asked.

"Sure," I said, entering the room. "I'm all through for the day."

He pointed to a chair and I sat down. "Bill, did you ever have an experience you couldn't explain?"

The question caught me off guard. "Why, yes," I said. "Plenty of them, I guess, but I don't recall one at the moment. What's on your mind?"

His mood was serious. Twilight had mantled the city but he made no move toward the light switch. He spoke slowly.

"A strange thing happened long ago. I was just thinking about it. I'd like to tell you the story."

I nodded encouragingly and waited.

"It happened on the B&O," he reminisced, "in October, 1910. I was braking on the Connellsville Division, Fairmont subdivision. My crew was one of three that switched the numerous coal mines and coke ovens between Connellsville and Uniontown, Pennsylvania, most of them located two to four miles away from the main life. We left a brakeman at the junction of those spurs to check the passage of regular trains, and this night it was my turn."

He had laid down his pencil as he reached back into the past. "I found myself in a tiny shack with a chair and a small, pot-bellied coal stove. It was chilly, so I built a fire. Now and then I went outside to look around and check on things. We had met one train, second 91, and had time on third 91 that enabled us to make the spur at the Oliver Steel Company's coke plant, where I was now on duty.

"Usually the brakeman at the junction would hear his engine whistle when the crew was ready to leave the plant, and he'd call the dispatcher to get orders, but if the conductor was there he'd get them himself. That night I did not hear the whistle. Our train was rounding the curve close to the junction before I saw it, with Conductor Davis riding the head end. He dropped off and walked toward me.

"At that moment I turned westward to face the switch and saw the headlight glare of an engine swinging around a curve about half a mile west of us. She was carrying green classification lights."

I followed Mitchell's story intently. He said he told the skipper that no train had passed but that, as they could see, third 91 was coming. The two men stood watching. A glow from the firebox reflected against the smoke plume trailing from the stack. Suddenly she stopped and, after a short time, backed out of sight around the bend.

"By that time," the super went on, "our engine crew and a couple of brakemen had joined us. We speculated about what was going on. After waiting a few more minutes Davis went into the shanty, picked up the phone, and asked for orders. The dispatcher gave us time on third 91 that authorized our movement to the next telegraph office, Evans, about six miles distant.

"Davis didn't tell the dispatcher what he had seen nor ask any questions, holding the opinion that some crew had pulled a boner and was backing to Evans. When we arrived at Evans we were given more orders on third 91 and continued rolling until we finally met third 91 at Connellsville Yard. She consisted of two light engines, backing up and not carrying green signals.

"That was strange. So the mysterious train that six of us had seen—or *thought* we had seen—near the Oliver Steel spur was not third 91 after all! What, then, was it? No wagon road came nearer than two or three miles away, so it couldn't have been a highway vehicle. And in thinking back, I did not recall having heard any engine sound. The whole thing was peculiar."

Superintendent Mitchell paused, picked up his pencil again, and asked: "How would *you* explain it, Bill?"

I shook my head. "Damfino," I said. "Mebbe a fog or silver mist reflected your own engine, but that wouldn't account for the green classification lights, even so."

Some reader might have a more ingenious theory. If so, I wish he would write to me at 9-A North Lane, Orinda, California.

ANOTHER puzzling incident occurred early in my boomer career, back in the days when I was young,

footloose, and fancy-free. Among the long list of roads I worked for was the Cotton Belt. I remember braking freight on first 17 for a conductor known as "Windy" Baker, and our parlor shack (rear brakeman) was Sam Van Dever. One night our train broke in two. Sam dropped off the rear end and walked back to flag the following train, second 17. Later, he told me about it.

Said he: "I planted a couple of guns on the rail and waited. I could hear her coming a mile or two behind us. As you know, the track curves through a patch of woods about a mile back. Just as the hogger reached the woods I heard him answer a flag, and then he shut off. After a bit I saw the engine nose out of the trees and as soon as she got close enough I swung her down. When I climbed up the gangway to tell the engineer why I was flagging him, he asked, "How'n hell many of you guys are flaggin'?"

" 'Only me.' I said. 'Why?'

" 'Well,' said the hogger, 'somebody or something flagged us back in that clump of woods. A red light was swung in a perfect stop sign, and when I answered it stopped swinging and disappeared. But when we got to where we'd seen it nobody was there. Nothing. No tree or animal or plant that could have looked like the swinging of a red lantern. And I wasn't dreaming. My fireman and head brakeman also saw it.' "

Sam asked me, "What do *you* think it was, Bill?" But I hadn't any idea, unless maybe a cow or horse grazing there had swung its head back and forth, which didn't seem likely.

WHILE you are solving those two mysteries, I offer a third case to test your wits. It concerns an engineer friend of mine, Henry G. Snyder of the Wabash, who had a freight run between Moberly and Kansas City, Missouri.

Henry was a real big man, tough and level-headed, and a throttle artist. None of us who knew him would say that Henry was superstitious. Not even after his story came out. But the story does make you wonder about a lot of things. Here it is:

"I made a trip with a conductor named John Enzline, whose caboose had been wrecked a short time before, killing another conductor, Runyon, who was riding it at the time. The thought of that wreck seemed to prey on his mind. He told me that he couldn't sleep in the crummy because he heard moans and groans that seemed to come from someone in pain.

"I told John to change his brand of liquor. But he worried so much that I agreed to spend a night in the caboose with him, just to prove it wasn't haunted.

"And that is what I did. At first the old way-car was quiet and peaceful, but later on that night I heard a groan and a low shriek. I looked across at John and told him, 'Cut it out!' John denied making the sounds. Even as he was speaking, they came again.

"It was very strange. We searched the caboose from coupler to coupler and from floor to roof, moving everything that might possibly rub together and produce noise. We went outside and looked around for overhead wires vibrating in the wind. There were no such things. We looked in the possum belly. I even got a bar and pried to see if it could move and cause a sound. It couldn't. Then I pried at the steps, jumped up and down on them, and tried everything else I could think of, reasonable and unreasonable, but with no luck.

"After that we lay down again and tried to go to sleep. The moans and groans began anew. I stood it as long as I could. At length I got up and told John Enzline: 'This crummy is all yours, brother. I'm getting out of here.' We both left and got beds in a rooming house for the rest of the night. I heard later that other crews complained so much about the same caboose that the Wabash finally dismantled it."

Such was Snyder's story. "Bill," he said earnestly, "I never did believe in the supernatural and I can't explain those sounds, but in all honesty the events happened exactly as I said."

Engineer Snyder died years later in East St. Louis. My guess would be that the peculiar noises he heard in the "haunted" caboose were caused not by the anguish of a ghostly wreck victim but by the contraction and expansion of its woodwork. What would *you* suggest?

IF YOU ever worked for the old Cairo Short Line, as I did, in the long-gone days before the Illinois Central took it over, you must have known Harry Nolan.

At the time, Harry was employed as an engineer on a yard goat. He was slim and cheerful, slightly older than me, and we soon became close friends. I missed him when, boomer-like, he quit the Short Line to get a job on the St. Louis, Alton & Springfield, known locally as "the Buff Line."

A few months after he left I had a weird dream. It seemed that I was standing on the deck of Harry's eight-wheeler speeding through the night. I felt that danger lay ahead and called to him to stop. But Harry only sat there looking calmly out the window, his right arm on the arm rest and his left hand on the throttle.

Frantically, in my dream, I reached up to close the throttle. It wouldn't budge. Then I tried to shove the brake valve into emergency, but couldn't move it at all.

After that I was wafted outside the cab, floating through the air and keeping pace with the engine. I shouted down to Harry, but he still sat motionless.

The moon was bright and I saw on a grassy hillside an isolated clump of bushes crudely resembling a question mark. We were descending a slight grade toward the broad, dark, restless Mississippi River. A few hundred feet after we'd passed the clump of bushes the engine struck a large boulder that blocked the rails. She reared, staggered to the right, and fell over on her right side with her front end in the river. I looked at my watch; it was 11:16 p.m. I had never been on, nor have I yet seen, a foot of the Buff Line's track, but the nightmare was so realistic that I wrote a letter about it to Harry Nolan the next morning. "If any place on your pike answers that description," I cautioned, "kinda keep an eye out."

But was it only a dream? Listen to what actually happened. At 11:12 that same night Harry was handling an eight-wheeler on the Buff Line. As she rolled down a slight grade, past an odd-shaped bush similar to the one that appeared in my dream, she struck a heavy oak plank that workmen moving crushed rock by wheelbarrow had carelessly left across the rails. The engine jumped the track, turned over on her right side, and nosed into the Mississippi River!

I am happy to add that Harry survived. My letter impressed him so much that he turned it over to a newspaper in Alton, Illinois, for publication.

Some mysteries have no solution. But I would like to hear from any reader who can offer a plausible theory for the nightmare, the mysterious train that vanished around a curve, the double flagging, or the haunted caboose. ●

Alexander A. Mitchell

Consolidation Type Engines

by H. L. KELSO

On view at Colorado R.R. Museum in Golden, Colo., is the state's oldest locomotive, ex-D&RGW No. 346 (2-8-0 type), which Baldwin built in 1881. R. W. Richardson, Box 641, Golden, Colo.

IF, AS A LOVER of steam engines, you insist on high drivers and fast running time, you may not care much for Consolidations (2-8-0's), even though that type played a distinguished role in railroad history.

Nearly all of them were produced originally to haul slow freight. But on mountain runs where dependability and tractive effort rather than speed were paramount, that type served well as passenger power also.

I am proud to have fired many 2-8-0's, years ago, as an ashcat on the Chicago & North Western; and when I say *fired* I mean with a scoop and muscular effort. Not all of my knowledge of locomotives came from reading books. You've got to work with a thing before you really understand it.

The very first 2-8-0, back in 1864, was an 0-8-0 to which John P. Laird of the Pennsylvania Railroad added a two-wheel leading truck. We know little about her. But the first 2-8-0 to be built as such was the Lehigh Valley's famous 63. Behind her is quite a story. It's a tribute to the genius and persistence of Alexander A. Mitchell.

Mitchell was the master mechanic who supervised the construction of Lehigh Valley shops at Delano, Pa., a great railroad town, and originated the *drop pit*, a device for taking the wheels out from under a locomotive.

In 1865 he designed a new type of locomotive, one larger than any other in the world at that time. He submitted his drawings and specifications to both the Grant Locomotive Works at Paterson, N. J., and the Matthias W. Baldwin Locomotive Company in Philadelphia, but neither plant was equipped to build such an engine.

Mitchell refused to be beaten. He went to Philadelphia, argued with the stubborn Mr. Baldwin, and finally persuaded him to install the equipment needed to build the proposed giant of the rails. Work started at year's end.

Seven months later, on July 10, 1866, Mitchell's iron monster puffed into Delano. She had eight driving wheels, each 48 inches in diameter, a pair of front-truck wheels, cylinders 20 by 24 inches, and a boiler 50 inches in diameter, and could generate steam pressure of 130 pounds per square inch.

Lehigh Valley men greeted her with cheers. She was numbered 63 and was named the *Consolidation* because two short roads, the Lehigh & Mahanoy and the Hazelton & Beaver Meadows, had just been consolidated into the Lehigh Valley system, and that is where the type got its name.

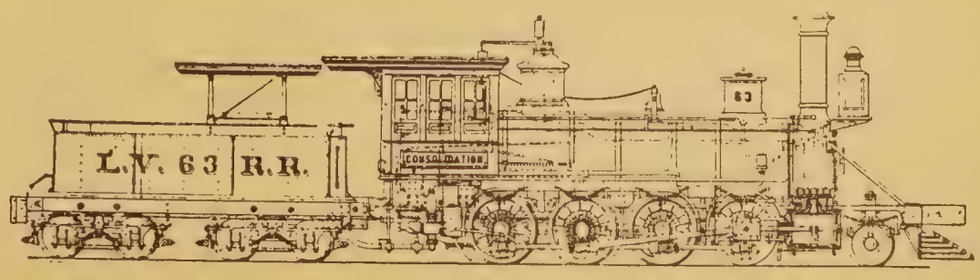
Even from the start 63 lived up to expectations. On test runs she hauled 100 empty four-wheel coal cars, weighing a total of 340 tons, up a grade of 76 feet per mile at a speed of eight miles an hour. Such a feat today would not be sensational, but in Alexander Mitchell's time it was something to rave about.

Motive power men from all over North America and some foreign lands made pilgrimages to Delano to see No. 63 at work. Later Baldwin built another 2-8-0 from Mitchell's original plans, which he altered slightly, named her the *United States*, and exhibited her proudly at the Philadelphia Centennial in 1876. So seriously was the *United States* taken overseas that the London magazine *Engineering* published a full description with sectional drawings.

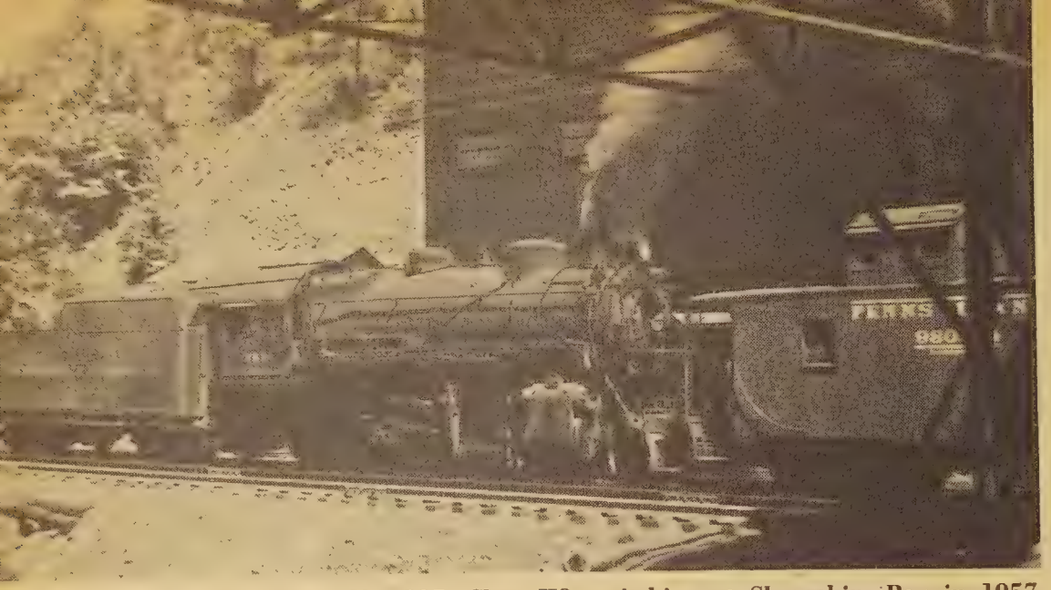
It was this type of locomotive, together with the 4-4-0 and the Ten-wheeler, that took civilization to the wilds of Western Canada, according to Matt Hedley, a Canadian National locomotive expert.

As recently as 1930 the CNR had a total of 3110 steam engines on its roster, of which 725 were Consolidations. These engines came from the many roads that now make up the Canadian National system, including the Atlantic, Quebec & Western, the Grand Trunk, and the Canadian Northern.

Matt recalls the time when a Mountain type (4-8-2), pulling the *Continental Limited* westbound out of Edmonton, failed and had to be replaced by a diesel locomotive as well as one of the few Consolidations equipped with a steam-heat line. What a combination, the diesel helping to furnish



Grand-daddy of all Consolidations: LV 63, built by Alexander Mitchell in '66.



Pennsy Consolidation No. 297, Class H9, switching at Shamokin, Pa., in 1957.
Savas Stavropoulos, 85-46 Chevy Chase St., Jamaica, N. Y.

power and the steamer providing both power and heat for the train!

Another Canadian National man, Bill Parry, now retired, explains the workings of an old 2-8-0 that he ran back in 1922. "She was No. 621," he writes, "a superheater equipped with a Stephenson valve gear, and well lubricated. How I obtained extra valve oil for her in those days is still a secret.

"The 621, like her sisters, was originally a Richmond compound, and in case you haven't seen one in action I'll tell you how she performed. She had a piston valve on the right (high-pressure) side, while on the left (low-pressure) side she had a slide valve and a cylinder as big as a cracker barrel. After steam from the high-pressure cylinder was exhausted it passed through an intercepting valve into the receiver and then was re-used on the low-pressure side.

"The engine started in simple position until the train got underway. Then her operating valve was put in second position and she worked with compound steam, provided the intercepting valve moved to the proper place. Hoggers who carried high water in the boiler often had trouble with the interceptor valve sticking. The usual procedure (not officially sanctioned) was to wallop the valve with a coal pick."

Bill says that this was one of the reasons why nearly all compounds were eventually converted to standard two-cylinder simple engines.

The Canadian Pacific's Consolidation story parallels the Canadian National's, hundreds of those plodders having been in CPR service. I was reading what Fred Jukes said about it in Railway & Locomotive Historical Society *Bulletin 97* and was particularly interested in Francis R. F. Brown, at one time CPR chief mechanical engineer.

At first the road had four Baldwin 2-8-0's, which it used in helper service out of Field and Revelstoke. Then Mr. Brown designed his own version of the Consolidation and put four of them into operation in 1886 and two more the following year. All were mighty engines. After them came a long parade of Consolidations, each new class bearing refinements that made them superior to the preceding class.

Most 2-8-0's have since been scrapped, but some were converted to more efficient 2-8-9's (Mikados) and 0-8-0 yard goats, and are running today but on borrowed time.

No doubt about it, the trend to heavier power began with the 2-8-0. Among the first American roads to adopt steel rails (1867), the Pennsylvania made immediate use of its sturdy new roadway by upping the weight of rolling stock and motive power.

Ten years later, the flower and fruit of the Pennsy's efforts to produce a standard, heavy-duty, freight locomotive was its first regularly-built 2-8-0. Designed at Altoona under the supervision of Theodore N. Ealy and built by Baldwin, this mighty engine weighed 91,640 pounds when she rolled onto Pennsy rails.

Shipped overseas to the Paris Exposition, she evoked much comment because of her novel firebox. Some experts maintained that the downward slope to the rear provided insufficient combustion area and a condition above the crown-sheet which would make for priming.

But this engine, like those of similar design built later, belied those predictions. The 2-8-0's were assigned to heavy work on the Philadelphia & Columbia Division with its ruling westbound grade of 49 feet per mile. They regularly handled 30-car trains (aggregate weight, 630 tons, excluding engine and tender). Given water-level conditions such as on the Susquehanna Division, it was not uncommon for one of them to maintain a speed of 25 miles per hour with an 85-car train weighing some 1800 tons.

In 1941 the Pennsy was the world's largest user of 2-8-0's, having 1305 of them on its roster. That, my fellow citizens, is a very impressive total. Besides, relatively few railroads have had Consolidations with 63-inch drivers, which was large, indeed, for locomotives designed mainly to be used on drag freight.

Aside from the *James Archbald,* a Delaware & Hudson experimental 2-8-0, we know of no other Consolidation in America that boasted such huge drivers. Possibly some reader can dig up proof of 2-8-0's with even larger drivers.

Many Baltimore & Ohio Consolidations had 62-inch wheels, while 61 inches was fairly common on other lines, including the Lehigh & Hudson River's behemoths, built by Baldwin in 1927. On the other hand, the narrow-gage Pacific Coast Railroad out of San Luis Obispo, Calif., had 2-8-0's with 37-inch drivers, and the Denver, South Park & Pacific, also slim-gage, used to climb steep grades in the Rockies with 36-inch drivers.

For power and ruggedness, the two-cylindered 2-8-0's of the old Philadelphia & Reading generally headed the list. So modern were these titans that the Reading, in its final years of steam, converted thirty of them into mighty 4-8-4's. The latter type, also known as Northern, was the last word in steam power as the era drew to a close in North America.

The Reading also won acclaim for the celebrated Mother Hubbard or Camelback 2-8-0's that it put to work in 1880. Equipped with 20x24-inch cylinders and 50-inch drivers, these double-cabbers were immense for their day. They snorted up and down the Schuylkill River valley, wheeling coal trains to such purpose that for years the type was firmly entrenched as the Reading's favorite tonnage-hauler, being supplanted in recent years only by Rudolf Diesel's invention.

Our data on Camelbacks comes from Warren D. Stowman of Philadelphia, who specializes in knowledge of two-cab engines. Warren gives us the as-

Turn this photo upside down and it will look about the same: Duluth & Northeastern 2-8-0 type No. 28 at Cloquet, Minn.
Robt. F. Collins (Erie RR. train dispatcher), 436 Radcliffe St., Wycoff, N. J.

tounding fact that a 2-8-0 Camelback which the Erie acquired from the Erie & Wyoming Valley was originally a three-cylinder job.

Another 2-8-0 Camelback was Pennsylvania Coal Company's 4-spot, designed by John B. Smith in the early Eighties. Judging from her picture, we'd say she was one of the most beautiful engines ever built.

The idea of using three cylinders, all the same diameter, to turn the driving wheels, was not new but the intelligent Mr. Smith was the first to prove it could succeed. In 1879 Smith designed a small 0-4-0 switcher at the company's Dunmore shops. All cylinders were the same size. The inside one drove a crank axle while those outside were in the usual location. An extra set of Stephenson link motion operated the inside cylinder.

Smith was so pleased with the new device that he tried it next on a larger engine for a full-size railroad, the Erie & Wyoming Valley, then owned by the Pennsylvania Coal Company.

This engine, a 2-8-0 with a Wootten boiler, began burnishing the rails in 1884. At first she was a novelty but as years fled down the long corridor of time many other locomotives were patterned after her elegant specifications.

For example, in 1921 H. N. Gresley designed some three-cylinder 2-8-0's for the Great Northern Railway of England. These were powerful iron horses for that country. They rated the oddity of Walschaert valve gear for the outer cylinders and Gresley's lever gear for the inside (third) cylinder. In 1913 Gresley also designed standard two-cylinder 2-8-0's.

The first Consolidations to run in England (1903) were big ones designed by G. J. Churchward for the Great Western Railway and boasted a tractive effort of 37,463 pounds.

Getting back to the Reading, we learn that in 1914 this road built 2-8-0's in its own shops with fireboxes having a vast grate area of 110 square feet, the largest ever known in engines of this type.

The last road to buy new Camelback 2-8-0's was the Lehigh & New England, in 1927. Along with older 2-8-0's, the L&NE had Consolidations that ranked close in power and weight to the Reading giants.

Hundreds of Consolidations plied the rails on such major systems as the New York Central, the Southern, the B&O, the Santa Fe, and the North Western, to name a few.

Did you ever hand-bomb (scoop-fire) a Consolidation? I remember it well. The job embraced two different experiences. If you had less than a full-tonnage train you would have found the 2-8-0 about the roughest-riding locomotive ever built. At 30 miles an hour the vertical jounce and jolt all but shook your kidneys loose from their moorings. On the other hand, with a tonnage train running at around 20 mph, the engine's gentle lateral sway and roll actually made heaving black diamonds a pleasure.

What wouldn't I give today for another chance to fire a Class Z Consolidation on the North Western! The Class Z's, because of the letter, were known as *Zulus*. Ponderous, powerful, and unromantic they may have been but I, for one, loved them.

Lawrence Sagle's *Picture Story of B&O Motive Power* eulogizes the mighty 2-8-0 which first saw service on his road in 1873. While Larry does not say it in so many words, he intimates that the B&O's Consolidations were evolved from the 0-8-0's built in earlier days by Ross Winans and the *Jersey Greenbacks* designed by Thatcher Perkins. I've heard it said that the famous Mr. Winans was actually forced out of the locomotive industry because he would not add a leading truck to his

cumbersome, unwieldy 0-8-0 engines.

Incidentally, the B&O had 2-8-0's with 62-inch drivers. As late as 1952 its roster listed 156 Consolidations, all active, exceeding all other road types except 418 Mikados. A Southern Pacific steam roster issued February 1, 1957, showed 58 Consolidations on the busy list. The newest was No. 2668, built in 1923, and the oldest was No. 3400, built in 1902.

Bill Knapke, a retired Southern Pacific conductor, tells me that his all-time favorite engine was the SP's 2599, a Baldwin Consolidation. The 2599 went to work in 1899, pulling the *Mountain Local* as a saturated (and later as a superheated) machine.

"As helpers," Bill writes, "we usually had either 4000 or 4001, the SP's first two Mallets. Both of those big mills had better than double the tonnage rating of No. 2599. Ready to start after a water stop at El Casco, either of these Mallets would lay behind the train, grunt and shove a few cars of slack, then just lay there. Thereupon the 2599 would take the slack, jerking the Mallet clear off her feet, and assume her share of the tonnage and away we'd go.

"Most engines of that class were sluggish. Crack the throttle and they wouldn't move until the dry pipe filled with steam; then they'd ram ahead two or three car-lengths before you could stop them. But the 2599 was different, just a touch of the throttle and she'd move like a cat sneaking up on a mouse."

Many readers have wondered how the slang words *hog, hoghead,* and *hogger* came into usage. The story goes that they were applied first to the then big 2-8-0's. Because those monsters ate an inordinate amount of coal while hauling high-tonnage trains, they were called *hogs* and the engineer a *hoghead*. Later the word *hogger* was used regardless of engine type.

The 2-8-0 did not run out its final miles in its original wheel arrangement. Many of those old warriors were converted to other types. Some had their leading two-wheel pony trucks removed and became 0-8-0 yard switchers, particularly on the New York Central and the Canadian Pacific.

Another notable conversion occurred on the Southern when 2-8-0 frames, wheels, and cylinders were placed under tenders latched to Mikado types. These became known as *tractor* engines. They were steam-fed directly from the boilers of the leading locomotive. For a time they were hailed as a great innovation but because the tender's use of coal and water decreased the tractive effort, the design died a natural but lingering death.

Twenty-two Great Northern 2-8-0's, built by Baldwin in 1910, were merged into giant articulated engines of the 2-6-8-0 type, Class M-2, and renumbered 1963 through 1984.

At that time the GN had 67 articulated engines, the largest total on any American road. These had been ordered in three batches, the first of which had proven so successful on 2.2 percent Cascade Mountain grades in both hauling ability and economy of operation that the company was encouraged to extend Mallet operation to districts having gradients as light as .072 percent.

This released an earlier lot of heavy Consolidations which the Motive Power department decided to convert into articulated machines. So Baldwin added to each locomotive a new boiler-section equipped with a feedwater heater, a superheater, and a smokebox. Beneath it was placed a six-coupled wheel unit, driven by low-pressure cylinders fed from the original high-pressure set.

The lead truck was moved ahead of this unit, and in most other respects—*i.e.*, grate area, heating surface, and so on—the characteristics of the Consolidation type were retained. It was estimated that in slow freight service the fuel consumption (per ton-mile) would be reduced by about 50 percent.

Here are the chief specifications of these locomotives as originally built (Consolidation) and after their conversion to Mallets (2-6-8-0):

	Consolidation	Mallet
Cylinders	20x32 inches	23 & 35x32 inches
Drivers	55 inches	55 inches
Pressure	200 pounds	210 pounds
Weight	210,350 pounds	378,300 pounds
Trac. Eff.	41,500 pounds	82,000 pounds

In 1926-27, the Great Northern rebuilt the 2-6-8-0's, retaining that wheel arrangement but altering the specifications somewhat. Engine weight was increased to 403,000, cylinder dimensions were cut to 22 and 23½ by 32, and the maximum tractive effort raised to 95,500.

For many years the Santa Fe thought well of the 2-8-0, especially its *Uncle Dick*. When Baldwin delivered this one in 1878 she was the world's largest steam engine. A veritable giant, she went into service over Raton Pass in New Mexico which had grades of six feet in every 100. The name *Uncle Dick* honored Richard Wootton, who in early days had owned a toll road over the pass.

It is said she was the only Santa Fe locomotive ever to bear a name as well as a number. Originally a tank engine, *Uncle Dick* was given a standard tender to become a conventional 2-8-0. (In case you didn't know, a tank engine is one with the water tank draped around her boiler or with the water tanks running along the sides of the boiler. The type first mentioned was a *saddle-tanker,* the other a *side-tanker.*)

Uncle Dick, which came to the Santa Fe as No. 204, could haul the marvelous load of seven 15-ton cars over the switchback. Originally equipped with a diamond stack, she was later modernized with a straight stack and larger drivers, was put into passenger service, and was scrapped in 1921.

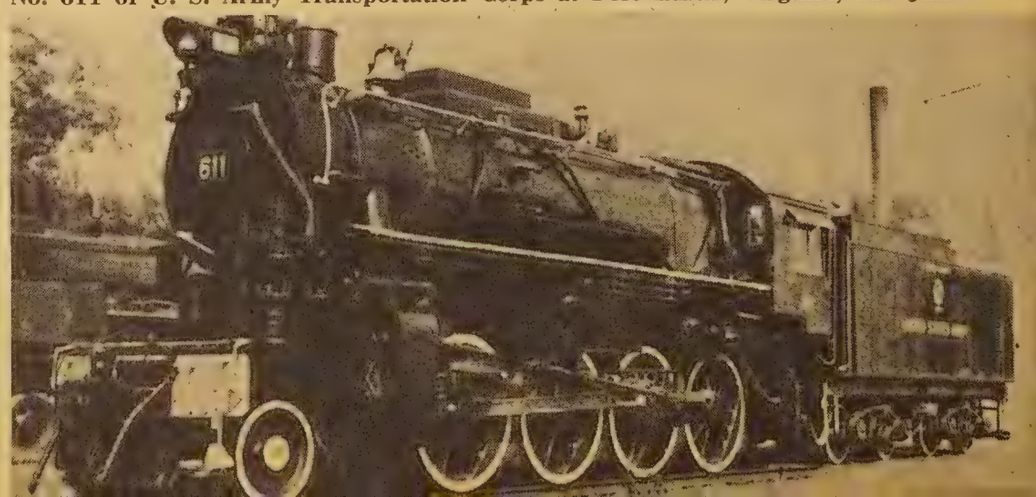
Incidentally, the first cast locomotive frames ever produced were applied to a batch of 2-8-0's that Baldwin built for the Santa Fe.

You may remember the illustrious names of Leonor F. Loree and John E. Muhfeld, who on the Delaware & Hudson developed America's first articulated engine, affectionately known as *Old Maud.* But Loree was mostly a 2-8-0 man; his Consolidations were about the finest of that type ever built.

While Loree and Muhfeld were designing motive power they agreed that the ultimate in a steam locomotive should be a high-pressure unit that re-

Stephen D. Maguire, 1411 River Road, Belmar, N. J.

No. 611 of U. S. Army Transportation Corps at Fort Eustis, Virginia, last June.



C&O 2-8-0 type No. 1627 at Clifton Forge, Virginia, in 1952.
David Plowden, 1239 Madison Ave., New York City

Union Pacific Nos. 6030 and 6022, both Consolidations.
Photographed by the author in 1945

lied on compounded steam, a simple conclusion that using steam twice would cost half as much as steam used once.

Late in 1924 a D&H Consolidation, No. 1400, the *Horatio Allen,* rolled out for experimental service. A cross-compound type, she carried a boiler pressure of 350 pounds and exerted a starting tractive effort of 105,500 pounds in simple gear with booster cut in.

In case you associate a *booster* engine with those on two-wheel and four-wheel trailing trucks, we refer in this case to what is known as the *tender booster.* The D&H in those days had no engine with a trailing truck under the firebox. This booster, small but powerful, was equipped with an engine mounted on the rear truck of the tender and geared to one of its axles. It received actuating steam from a pipe which led from the left steam chest.

The first such booster was installed in 1912 beneath the tender of a Camelback 2-8-0, No. 901, enabling her to pull trains of 800 tons heavier than sister engines not so equipped. In road service the 1400 handled the same tonnage on eight tons of coal that two standard 2-8-0's would have hauled while burning upward of twelve tons.

Then, in 1927, the next great D&H Consolidation, outshopped by Alco, was numbered 1401 and named the *John B. Jervis.* She differed from the 1400 in that she had a boiler pressure of 400 pounds to compensate for smaller cylinders.

Next, in 1930, came the *James Archbald,* with a tremendous boiler pressure of 500 pounds, and in 1937 a 2-8-0 was rebuilt with an all-welded boiler, first of its type anywhere in the world.

Actually, the Consolidation saw service on every continent. For example, a fairly recent roster of the Central of Peru, "the Railroad in the Sky," listed 2-8-0's built by the North British Works in 1908, Rogers in 1906, Alco in 1944, and Beyer-Peacock from 1935-'53.

A letter from Charles Small, mining engineer at Oroya, Peru, has this to say about the world's highest standard-gage railroad: "On my way up from Lima our engine was a small 2-8-0, English-built but with American-type couplers and headlight. As soon as we pulled out of the station she began to labor on the long climb. I lost track of the number of switchbacks. We reversed direction every 15 minutes, and at several points I looked out the window to find four sets of tracks below me, all strung out like the steps of a ladder.

"Halfway up, we passed a freight train, heavily loaded with copper but without any power-brakes! Brakemen rode every one of the eight cars, and inside of each a man twisted handbrakes."

At one time the 2-8-0 was the heaviest locomotive in Australia, and in 1930 the Nydquist & Holm Works at Trollhatten, Sweden, outshopped a powerful 2-8-0 turbine type.

Apparently the first locomotives to use automatic stokers successfully were the Consolidations that began running in 1902 on the Great Northern and the Big Four, the device being the Day-Kincaid stoker.

Yes, sir, the 2-8-0 was quite an engine! A feature-length story could be written about those that the United States Government used in both world wars and in Korea. And you might check into the history of the Army's Transportation School at Ft. Eustis, Va., where the 2-8-0 helped to train our fighting men in the art of transporting troops and supplies under wartime conditions.

According to C. M. Simpson of Eldorado, Ark., the Warren & Saline River in his state is still operating a 2-8-0 out of Warren. She was built for the Army during World War II and (will wonders never cease?) replaced a diesel that had been in service for some time. It seems that the 2-8-0's greater tractive effort eliminated overtime on the road.

If you should ever visit Dublin, Ga., call on J. L. McMillan, president and general manager of the Wrightsville & Tennille, for a peek at an old Consolidation, No. 223, that is stored there. She came to the W&T in 1952 and was fired up for the last time in December, 1956.

Among the best-maintained steam locomotives of any type that you can find in America today are two Consolidations, formerly Nos. 207 and 208 of the Southern, that are now operating on the little "Tweetsie" line out of Blowing Rock, N. C. Another Consolidation is pounding the rails of the Magic Mountain, a Disneyland-type railroad west of Denver. Both roads are well worth visiting.

Considering these few remnants of bygone glory, it is hard to realize that our great locomotive builders actually turned out more 2-8-0's than any other type of steam engine. The pioneer *Consolidation* that the far-sighted Alexander Mitchell designed for the Lehigh Valley, back in the troubled days that immediately followed the Civil War, made history in a way that not even he could have foreseen.

INFORMATION BOOTH

Modern rail-laying is "panel track" method used by construction crews in building Avon Yard for the New York Central Railroad near Indianapolis, Ind.

1 *Jersey Central diesel locomotives are painted green and yellow, but a model train manufacturer is selling blue and orange CNJ diesels. Why?*

He hasn't kept up with events. CNJ originally painted a few road diesels (no switchers) blue and orange, but in the past 10 years it has been painting all diesels green and yellow.

2 *What is the world's total railroad mileage?*

Approximately 773,000, of which 28 percent is in the United States.

3 *Which railroad is used in the TV series "Tales of Wells Fargo"?*

Sierra Railroad. The producer, Nat Holt, 4024 N. Radford Ave., Studio City, Calif., is a longtime subscriber to this magazine. He asks: "Where can I buy a steam engine, a combination baggage car and smoker, and 2 or 3 coaches, all narrow gage?"

4 *What were "McQueens"?*

Steam locos, mostly 4-4-0's, built at the Schenectady (N. Y.) Locomotive Works under Walter McQueen's direction. All were fast, reliable, and easy to operate. Many roads had them but for years the New York Central used them almost exclusively.

Born in Scotland in 1817, McQueen came to America and worked as master mechanic on several roads. In 1852, when the Schenectady plant was new, he became its m.m. and general superintendent, and later vice president. He and Wm. Buchanan, the Central's motive-power chief, cooperated in building engines for the *Empire State Express.* Although the speedy 999 was built at the Central's West Albany shops in '93, about the time McQueen died, she bore the earmarks of his genius.

Walter McQueen

5 (a) *Does the Fairbanks-Morse diesel locomotive have two ordinary engines fastened head to head and timed off of one main crankshaft?* (b) *Which was the first F-M diesel ever built?*

(a) No. It is a single two-cycle engine with two crankshafts, and two pistons opposing each other in each cylinder. (b) Milwaukee Road's 120-ton, 1000-hp switcher No. 1802, renumbered 760. It hit the rails at Milwaukee in Aug. '44, is still in service.

6 *You foresee no live steam engines left on U.S. main lines after 1964. What about those in stand-by service?*

Eventually they'll go to museums or junk piles. Worn-out or broken parts are hard to replace. Such items are no longer being made, and the supply of "cannibalized" steamers is dwindling fast. Pretty soon you won't be able to get the parts except by manufacturing them at fantastically high cost.

7 *In diesel-electric locomotive cabs what is the transition lever used for?*

To change connection to the transition motors from series-to-series shunt to parallel-to-parallel shunt. This matches the output of engine and generator to input characteristics of the traction motors at various train speeds.

8 *On a fantrip I saw a parlor car named* Julia Ward Howe. *Who was she?*

Author of *Battle Hymn of the Republic*, the only woman ever elected to the American Academy of Arts and Letters.

9 *Which railroad hauls the most coal?*

Chesapeake and Ohio operates the world's biggest fleet of coal cars, over 68,000, mostly hopper bottom, with some flat-bottom gondolas, but the Reading is top carrier of anthracite.

10 *How many steam locomotives are still in service in the United States?*

Latest figure from Association of American Railroads, 975 last Oct. 1, covers only Class 1 roads (which owned 28,974 steam locos in 1949). We don't know how many the small roads have.

11 *Which was the first diesel locomotive built by GM, Electro-Motive Division?*

A 600-hp switcher built May '36 at La Grange, Ill., for the Santa Fe.

F-M's first diesel, built in 1944, is still on active duty with the Milwaukee.

12 *Is the Jersey Central's* Blue Comet *still operating?*

No. It ran between Jersey City and Atlantic City until Sept. 27, 1941.

13 *Was there ever a steam engine with a 6-8-6 wheel arrangement?*

Yes. Whyte Classification (Oct. '59) listed the only one we know of: Pennsy steam turbine S-2, with a modified Belpaire firebox. She was designed for fast passenger service but needed too many repairs.

14 *Why can't Rock Island passengers from Colorado and California get off trains at Lawrence, Kan., although those going to or from nearer points on the Rock Island may use Lawrence facilities?*

Our answer comes from Bill Hayes, a former *Railroad Magazine* editor and now CRI&P executive assistant:

"Union Pacific owns the line between Kansas City and Topeka and is competetive to points in Colorado and California. The contract allowing us to use its tracks between K.C. and Topeka forbids us to sell tickets to any point in those two states to people wanting to board a train in Lawrence. It also prevents our Colorado and California offices from selling tickets to Lawrence.

"If you are in Los Angeles, for example, and want to go to Lawrence by rail, you ride the UP to that point or else ride the Rock Island to Topeka and a UP local the rest of the way."

15 *Were the Virginian's 800's the most powerful steam locos ever built?*

Yes. One of the road's annual reports said: "Designed for helper service the 2.07 percent grade of Clark's Gap Mountain, they are the heaviest and most powerful engines in the world built for actual service."

16 *When a diesel locomotive smokes almost continuously does that mean its engine is wearing out?*

Not necessarily. It could be caused by a worn injector or low-grade fuel.

17 (a) *How much ownership does Great Northern have in* (a) *the Burlington and* (b) *the SP&S?* (c) *What is the* Empire Builder's *top speed?* (d) *What is the greatest number of steam engines the GN owned at any one time?*

(a) 59% of common stock. (b) 50% of stocks and bonds, including SP&S and its subsidiaries, Oregon Trunk and Oregon Electric. (c) GN operating timetable says 79 mph. (d) 1,428 in 1920.

ASK BARBARA: **Railroad questions are answered here by our research expert—as many as space permits. Top priority is given to subjects of general interest. Address Miss Barbara Kreimer, *Railroad Magazine*, 205 E. 42nd Street, New York 17, N. Y. No replies will be sent by mail.**

18 *Is there such a thing as a standard railroad wrist watch?*

No. "Because," says D. H. Hendrix, superintendent of the Clinchfield, "in train operation, particularly with timetables and train orders when the time element is so important, we feel that the standard pocket watch is much safer and more dependable than the wrist watch."

19 *Which was the world's heaviest 4-8-4?*

Santa Fe No. 2903, Class 2900; Baldwin, 1944; 80-inch drivers, 28x32-inch cylinders, 300 lbs. steam pressure, 66,000 lbs. tractive effort; used on both heavy passenger and fast freight runs.

20 *Why did the Atlantic Coast Line put Vista-Dome cars on its Chicago-Miami runs but not on its New York-Miami runs?*

The cars are too high to pass through a tunnel at Washington, D. C.

21 *I've heard of cases where a widow was given a crossing watchman's job once held by her husband. Does any railroad have a rule against a man and wife being on the payroll at the same time?*

The only such rule we know of was adopted recently by the nationalized Taiwan (Formosa) Railway, 590 route-miles, operating 257 steam locomotives, controlled by Chiang Kai-Shek and partly supported by American taxpayers. Lou Gollop of the St. Paul *Pioneer Press* reports that as a result of the new rule, 40 railway women went into Taipei district court and applied for divorces. All said they preferred working for the railway to being married.

22 *Why aren't American standard (MCB) railroad couplers used in Europe?*

Actually, a few *are* used—on MU's,

diesel railcars, etc., which do not operate in interchange. But nearly all European railway equipment has standardized link-and-pin couplers and operates in interchange. To adopt MCB's would change virtually all of the couplers in Europe, an incredibly costly project.

23 *In about 1948, Electro-Motive built models BL1 and BL2 branch-line diesels. How many and for which roads?*

There was only one BL1, demonstrator 499, later sold to the Chicago & Eastern Illinois, renumbered 202, but 58 BL2's were built for the following:

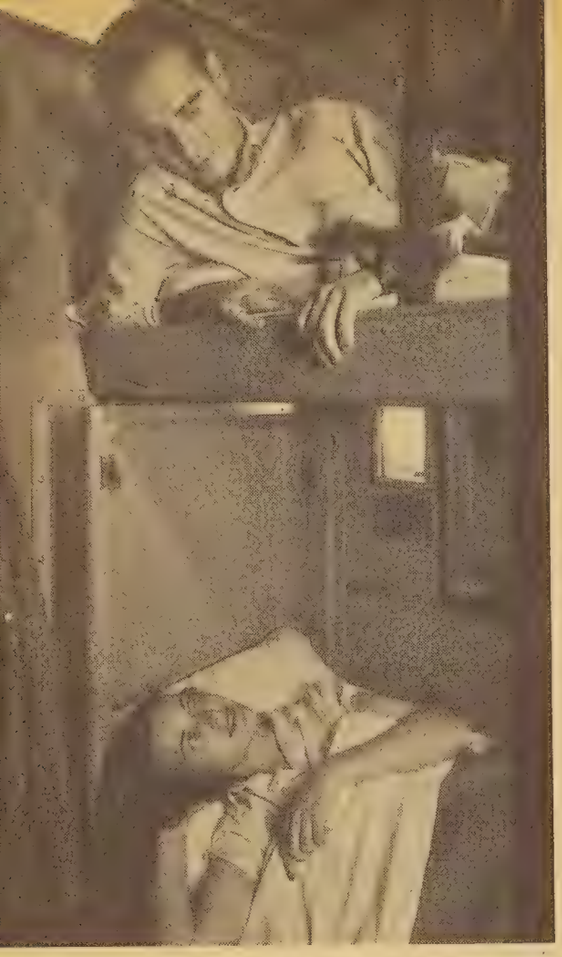
Name of Road	Class	Road Numbers
Pere Marquette	BL-2	80-85, 1840-1847
Missouri Pacific	none	4104-4111
Florida East Coast	none	601-606
Monon	none	30-38
Western Maryland	DF-15	81, 82
Bangor & Aroostook	Ia	50, 52-55, 67
	Ib	51, 56
Boston & Maine	DRS2-a	1550-1553
Rock Island	none	425-429

24 *I once saw a picture of a British Railways station lit by its own private supply of natural gas. Explain.*

Many years ago natural gas, piped up from the ground beneath the station at Heathfield, Sussex, England, was used to illuminate the depot. Later it was found more economical to compress the gas into cylinders for the British Ministry of Power, which is being done today.

25 *Does a diesel locomotive have any kind of mechanical clutch?*

No. Its electrical system allows the diesel motor and generator to run at full speed and thus develop maximum hp while the actual locomotive may be standing still or running very slowly. This is equivalent to a clutch and is often called "electrical transmission."



"Hiya, beautiful!" The scene is a double room on one of the Slumber-coaches that Northern Pacific has just added to its Vista-Dome *North Coast Limited*, which runs between Chicago and Seattle.

Long ago, mechanical clutches such as those used on automobiles were tried on diesel locomotives but could not endure the intense vibration of railroad service.

26 (a) *What is the meaning of two white flags displayed on front of a train by day or two white lights by night?* (b) *I saw a red flag on a Santa Fe locomotive. What does it mean?*

(a) Train is running without timetable authority. Some roads that run nothing but extras (and even some with regularly scheduled trains) omit this display.

(b) Locomotive must not be moved or switched till flag is removed.

27 *How is the gage problem overcome on the London-Paris overnight express, with coaches from one country using the rails of the other country?*

Sy Reich, who spent last summer in Europe, replies: "There is no such problem. Railway systems of both nations are standard gage. But the Spanish National Railways have wide gage. International coach passengers originating in Spain or France change trains at the border. Wagon-Lits, the European equivalent of the Pullman Company, operates through sleepers between the two countries, their wheels being spring-loaded on the axles to adjust to difference in gage."

28 (a) *On Budd disk brakes, is the shoe pressure applied to the outside or inside of the disk?* (b) *What is the difference between automatic air-brake and straight air-brake?* (c) *What is a self-lapping brake valve?*

(a) Usually inward.

(b) In automatic system the brake pipe is kept charged to a fixed pressure to keep brakes released. When brake application is made, pressure in the brake pipe is *reduced*. In a straight air-brake system the pipe is kept at atmospheric pressure to keep brakes released. Pressure in the brake pipe is *raised* to make a brake application. The amount of braking force depends on how much the pipe pressure is raised.

(c) One that maintains a constant pressure in the brake pipe for each setting of the brake handle regardless of leakage. Thus, to get a 20-pound application, the engineman merely moves the handle. A self-lapping valve automatically adds to—or subtracts from—the brake-pipe pressure to maintain that 20-pound reduction.

29 *When were the operating rules of American railroads standardized?*

In the year 1887.

30 *What is the average annual pay of U.S. railroad employes?*

Including executives, $5,860, an all-time high. Average salary of brass collars and their staff assistants is $13,873. Section men, in the lowest bracket, get $4,202 a year. Presidents raise the average. For example, Alfred A. Perlman of the New York Central gets $125,000. Mr. Perlman rejected as "an insult" a recent stockholders' proposal that all Central officials earning $50,000 or more take a 10 percent cut.

31 *List the longest railway tunnels.*

Here they are, with the names, length in miles plus yards, and names of operating railways:

Simplon I	12—559	Swiss Federal, Italian State
Simplon II	12—537	Swiss Fed., It. State
Appenine	11—892	Italian State
Gotthard	9—562	Swiss Federal
Lotschberg	9—140	Bern-Lotschberg-Simplon (Switzerland)
Mount Cenis (Frejus)	8—855	Italian State
Cascade	7—1,397	Great Northern
Arlberg	6—650	Austrian Federal
Moffat	6—373	Denver & Salt Lake (D&RGW)
Shimizu	6—50	Japanese National
Kyineshei	5—1,112	Norwegian State
Rimutaka	5—821	New Zealand Govt.
Ricken	5—608	Swiss Federal
Grenchenberg	5—581	Swiss Federal
Otira	5—564	New Zealand Govt.
Tauern	5—551	Austrian Federal
Haegebostad	5—467	Norwegian State
Ronco	5—277	Italian State
Hauenstein (Lower)	5—95	Swiss Federal
Col di Tenda	5—56	Italian State
Connaught	5—39	Canadian Pacific
Karawanken	4—1,683	Austrian Federal
Somport	4—1,572	French National
Tanna	4—1,498	Japanese National
Hoosac	4—1,230	Boston & Maine
Monte Orso	4—1,230	Italian State
Vivola	4—1,004	Italian State
Monte Adone	4—760	Italian State
Jungfrau	4—750	Jungfrau (Switzerland)
Borgallo	4—700	Italian State
Severn	4—628	Western Region (British)
Lusse (Vosges)	4—474	French National
Marianopoli	4—42	Italian State
Turchino	4—10	Italian State
Wochein	3—1,652	Jugoslav State
Mont d'Or (Vallorbe)	3—1,388	French National
Col de Braus	3—1,226	French National
Albula	3—1,134	Rhaetian (Switzerland)
Gyland	3—972	Norwegian State
Totley	3—950	London Midland Region (British)
Peloritana	3—676	Italian State
Puymorens	3—641	French National
Monte Massico	3—601	Italian State
Senzan	3—583	Japanese National
Gravehals	3—529	Norwegian State
Biassa	3—348	Italian State
San Cataldo	3—342	Italian State
Mount Royal	3—268	Canadian National
Ohara	3—256	Japanese National
Woodhead (New)	3—66	London Midland Region (British)
Standedge	3—66	Northeastern Region (British)

32 *What is transition? Why is transition necessary and how is it accomplished on a diesel-electric locomotive?*

Reconnecting the traction motors of a diesel-electric from all in series to a combination of series and parallel. When a locomotive with a B-B wheel arrangement starts, all four traction motors are connected in series. After transition, two of those motors are connected in parallel and the other two are likewise. Thus two sets of two motors each are connected in series.

DC traction motors have these characteristics: The torque (turning force) they develop is proportional to the current (amperes) flowing through the motor. Thus, more current, more torque; less current, less torque. As the traction motor speeds up, a "back emf" reduces the current that the generator can force through the motors.

These facts show the need for transition. While the locomotive is standing still, the amount of current that can flow through the traction motors—and hence the starting force they can develop—is limited only by the horsepower output of the diesel engine and the main generator attached thereto.

As this force causes the locomotive to accelerate, the back emf limits the amount of current that the traction motors can get, and hence the amount of force available to accelerate.

Thus, as speed increases, less and less force becomes available to accelerate. Depending on the equipment, a speed will be reached at which it would no longer be possible to accelerate the

Changing Patterns on the Southern Pacific

(Above) SP has eliminated its 78-year-old Horseshoe Curve in West Texas by building straight track and (right) finished the Great Salt Lake causeway a good year ahead of schedule.

train on level track, even though enough power is being put out by the diesel motor.

This is comparable to putting your automobile into first gear and going to the maximum speed. Transition is like shifting automobile gears. When the traction motors are reconnected to series-parallel, the main generator can pump more current through the motors and continue to accelerate.

Connect an ammeter which measures current to the traction motors. When this meter shows that a lot of current is being fed into the traction motors, the locomotive will be putting out the required drawbar pull.

However, as soon as the train gathers speed, the ammeter needle begins to dip, indicating that less and less current is being fed to the traction motors, and transition is indicated.

The actual electrical switches that reconnect the traction motors are operated electrically or electro-pneumatically and are located on a control panel.

On early diesel-electrics, a separate transition lever was provided for the engineman. He watched the ammeter, and when the current dropped too low he would idle the diesel motor, operate the transition lever, then re-apply power to continue to accelerate.

Later, automation took over. A special current sensitive relay was connected in the traction motor circuits so that when the current fell too low, it would automatically unload the main generator, reconnect the traction motors, then re-apply power, all without the attention of the engineman. Backward transition as the engine decelerated also took place automatically.

Most diesels manufactured today have automatic transition with a lever provided so that the engineman can control any manual transition locomotives that may be MUed to the newer units.

Running Extra

When you answer a question that appeared in Information Booth *or* Running Extra, *be sure to mention the item number and date of issue.*

JUDGING from recent mail, many readers have stumbled upon a well-guarded secret, namely, the existence of diesel locomotives. We are surprised at the sudden interest shown in this subject. Sy Reich answers most of the diesel questions we get.

Data on the Washington & Old Dominion is wanted by Margarete Templeman, 1721 Virginis Lane, Falls Church, Va., for a book she is writing.

We agree with E. M. Neff, 1515 Maryland Ave., Springfield, O., who says that readers should acknowledge information which is sent to them in answer to published requests.

"I am interested in Fort Benning Light Ry., 1919-'46, and its 2-6-2 engines, one of which is now on display here," writes Rolfe Hillman, Jr., 404-B, Lumpkin Rd., Ft. Benning, Ga. "What happened to the others?"

"When did Cincinnati Northern passenger service end?" asks D. Roebuck, Sky Line Dr., Mayville, Ky.

Robt. Brendel, 1305 Bruce Rd., Oreland, Pa., writes: "Someone asked about a *cow* and a *calf* with a *slug* added. This arrangement is sometimes called a *herd*. The Southern uses two *cows*, with a *slug* between, in their Ernest Norris Yard near Birmingham, Ala."

Item 18, Dec. '59, evokes this comment from a Norfolk Southern fireman, Curtis McFaden, 1804 Canton Ave., Norfolk, Va.: "A 31 order restricts the superiority of a superior train. The 19 order does not; it usually gives rights over other trains. On my railroad, the conductor must sign a '31' to restrict the superiority."

Information on the Cumberland & Manchester is desired by Tom Manchester, 212½ S. Main St., Aberdeen, S. D.

History of the Ahnapee & Western, in Wisconsin, is sought by K. M. Smith, Sr., 758 Maple St., Fostoria, Ohio.

Jim McKay asks where he can find steam engines stored or ready for scrapping on a long list of roads. Sorry, Jim, we don't have that data. Even if we had, it would be obsolete before we could print it.

"What became of C&NW engine 90 that thrilled my father long ago?" asks Davis Sroka, West Union, Minn.

Wanted by Grafton Comegys, 335 S. Franklin St., Wilkes-Barre, Pa., data on Armour Leather Co. engine No. 4 at Williamsport, Pa., built by Porter.

The Pennsy is not the only road with passenger-train telephone service (Dec., item 10). Southern Pacific trains 75 and 76, *The Lark*, also have it, says Karl Koenig, 806 Peninsula Ave., Bur-

lingame, California. Are there others?

"I bought a bell from an old Grand Rapids & Indiana engine," writes Harold Shuman, Rte. 4, Waynesboro, Pa. "Who can tell me the road's history?"

T. J. Gascoyne, who commented on the Utah Northern (Dec. issue), please contact John B. Gascoyne, 4520 Adrian St., Rockville, Md.

Since that item about them appeared in our February issue (page 36), Arthur E. Phelps and David R. Frankenfield, 427 E. Fairview St., Bethlehem, Pa., have been busy sending individual answers to railroad questions. In return for free service to those who write them, Art and Dave ask only that each inquirer enclose a self-addressed stamped envelope.

Add C&NW to the lists (Feb. '60) of roads dispatching train by Morse telegraphy, says John Stoebell, Box 473, Salem, S. D. Add also Erie branch commuter traffic.

History of Central Penns. Lumber Co. is sought by Arthur F. Nelson, RFD 1, Box 154, Kane, Pa.

"Where can I buy copies of Walter Greene's and Grif Teller's NYC and Pennsy calendar pix?" asks Al Staufer, Box 57, LeRoy, Ohio.

Wanted by W. Sylvester, 128 S. 47th Ave., Bellewood, Ill., a history of the Tolucca, Marquette & Northern.

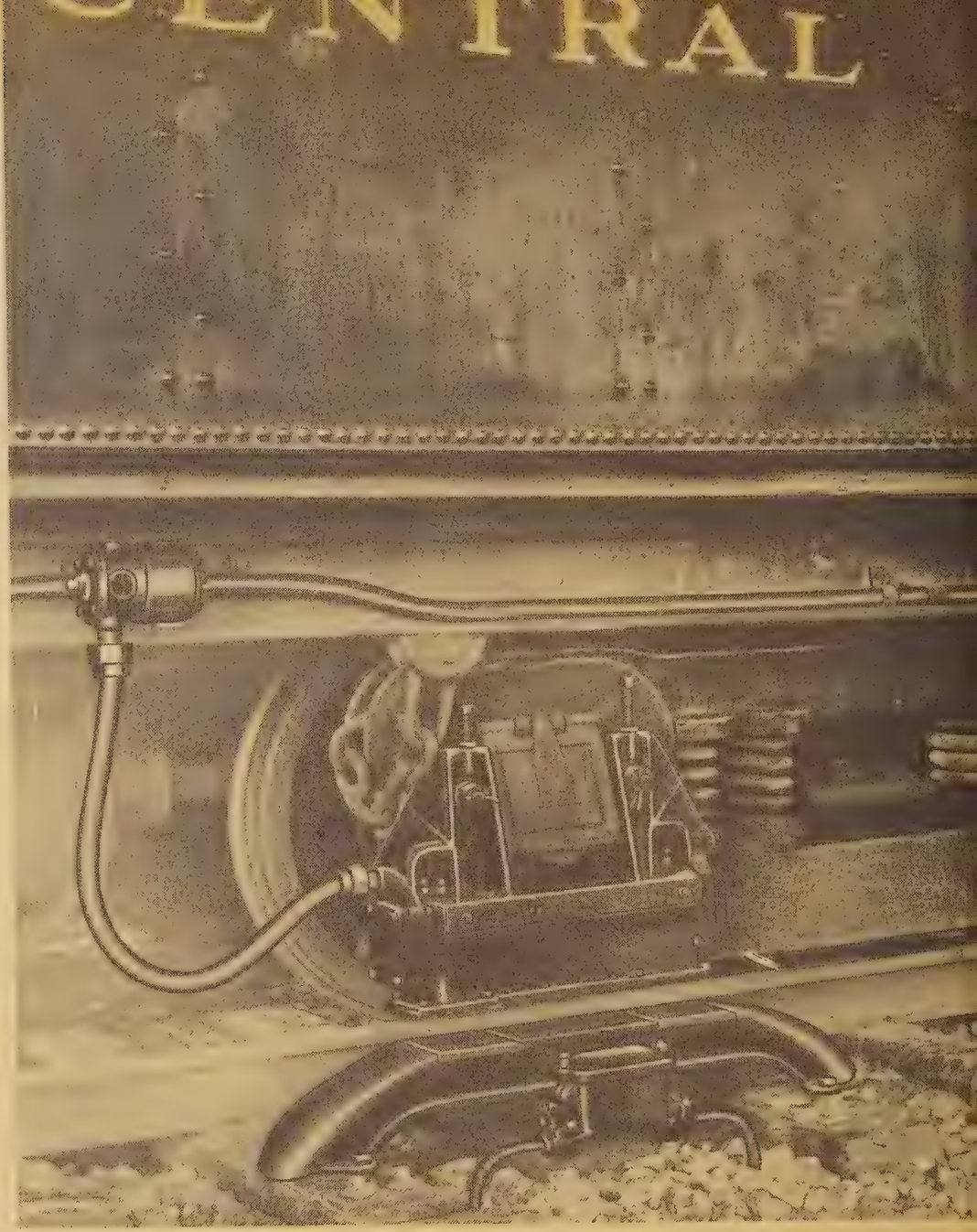
Is any reader interested in information assembled by English-born Walter Hales, 1 Cheney St., Orange, Mass., on the subject of "slip coaches" used on British Railways?

History of the Apalachicola Northern in Florida is sought by Wm. Combs, P.O. Drawer 98, Venice, Ill.

"Freight runs of both Santa Fe and Union Pacific through Cajon Pass use GP-9's, while Santa Fe also uses F-7's," writes Robert Del Grosso, Box 482, Rosamond, Calif. "I agree (Dec., item 1) that it's a good place for action shots. I took about 100 feet of movie film there and it turned out fine. SP is laying rail to the pass, starting about 5 miles south of Palmdale."

"Where can I buy Dietz kerosene railroad lanterns?" asks C. Zalkaukas, Rte. 4, Flemington, N. J.

Who can give Joe Smith, 2320 17th St., Troy, N. Y., a history of the Oneida Western and its motive power?



Intermittent inductive train-stop receiver and wayside inductor. (Details on p. 33.)
General Railway Signal Company

Where is Wm. Sheldon, age 42, one-time switchman on Chicago Great Western and other roads? "I haven't seen him since 1952," says his father, retired Rock Island switchman R. B. Sheldon, 367 31st Drive, S.E., Cedar Rapids, Iowa.

Answering a query in our December issue, Thomas Lawson, Jr., 2533 Montevallo Rd., Birmingham, Ala., gives a brief history of the old Warrior River Terminal Railroad.

This 21-mile system extending between Ensley and Birmingport, Ala., was built in the early 1900's, primarily to haul freight from the Tennessee Coal & Iron Co. mills at Ensley to barge traffic at Birmingport.

Traffic rights over the Birmingham-Southern takes the line 2½ miles further into Fairfield, Ala. where the B-S shops are located and where the Warrior River locomotives are serviced.

Present equipment includes three steel cabooses, some steel and wooden boxcars, and three Alco diesel locomotives, Nos. 50, 60, and 61. The latter two are hood-units usually run MU. No. 50 is an old switcher, built 1939, seldom used. A fourth diesel was scrapped a few years ago.

All steamers have been scrapped. The last was a 2-8-2. Others included a few Russian-type Decapods. Warrior River Terminal was controlled by the U. S. Government until 1952, when it was given its present name, Federal Barge Lines, Inc.

Russell Hawkins, 119 S. Grant St., San Mateo, Calif., wants to contact mechanical engineers formerly with Lima loco works. Also engineering v.p. Bert Townsend and P. W. Kiefer. Can anyone help?

CAB SIGNALS AND TRAIN CONTROL

by Sy Reich

SOFT lights of the diesel enginehouse in a dark background give an eerie glow to our April cover photo. This scene at South Amboy, N. J., on the Pennsy's New York & Long Branch line, was shot by Bud Rothaar, 757 Pierpont St., Rahway, N. J., after many attempts.

In order to show sparks from the acetylene torch, Bud had to work at night, taking into account the safety rules that covered the blue light on the Pennsy sharknose diesel, No. 5578, and the wearing of protective gloves and goggles.

It was a complicated job. First he photographed the diesel alone, using a time exposure and flash bulbs. Then he repeated that shot but with machinist Frank Singer and laborer John Crews superimposed in front of the locomotive. Bud's main problem was to have the men stand motionless and still gain the dramatic fireworks of the cutting torch.

The picture, which shows part of a cab signal being repaired, highlights the fact that railroad signals other than the ordinary wayside variety are needed to enforce safety and to make train operation flexible.

In the late 1880's, when train wrecks were more frequent than they are today, the Pennsy tested a device to stop any train whose engineman was ignoring a red signal because he had fallen asleep at the throttle or for any other reason. A sealed glass tube mounted above the cab would, if shattered, send the brakes into emergency. Wayside apparatus located just above the rails would break the glass if the train was moving past a stop signal.

At times a bough, an icicle, or some other object would break the glass and stop the train, thus invalidating the device, but many new experiments were made to develop a more workable train-control gadget.

About 60 years ago trackside stop-arms and train-carried trippers were introduced. Pneumatic or electrical mechanisms raised and lowered the arms. When a nearby signal indicated danger, the stop-arm, located about six inches outside one rail, would rise about 2½ inches above rail-level. A trip-clock on the leading truck of a train trying to pass a red signal would be engaged by the raised arm, putting the brakes in emergency and forcing a stop. With a clear signal, the stop-arm would drop below rail-level, letting the train run without interference.

This system succeeded on city subways and els but not on regular railroads, because steam-road trains equipped with trippers could be tripped by tin cans, piles of ballast, snow, ice, and so on. A better method was needed.

Advances in the electronics field permit the transmission of data (caution, speed limits, etc.) to a moving train without physical contact. In conjunction with auxiliary apparatus carried on a train, the speed limit or other warning can be enforced with a penalty of automatic-brake application for the engineman failing to heed a wayside indication.

Two cab-signal types, continuous and intermittent, appeared. The former constantly transmits data to moving trains. With the intermittent type, the train's electrical apparatus gets the information at each signal and displays it to the engine crew.

Of the two, the intermittent is simpler. The train carries an electrical generator, a receiver outside the locomotive on the truck frame, and an electrical relay. Electrical energy passes normally from the generator, through the receiver, to energize the relay.

Along the right-of-way, set on long ties, "inductors" are placed so that when a train goes by, the train-mounted receiver passes about two inches above (but not touching) the trackside inductor. This inductor has an inert (non-powered) coil to which connections are varied by the wayside signal apparatus. Depending upon the signal indication, it either influences the receiver or doesn't.

Passing a caution or danger signal causes the receiver to induce a voltage in itself opposite to that of the generator. The receiver then acts like a switch in off position, which de-energizes the relay and, through other electrical circuits, blows a whistle in the locomotive cab to warn the engineman. If he doesn't respond properly, it applies the brakes automatically.

Slight variations of this principal transmit several "indications," or signals, to the locomotive. The New York Central, the Lehigh Valley, and the Erie are among the roads using this basic form of cab signaling and train control.

In the continuous inductive train-control system the information on signal indications is transmitted through the rails rather than through indicators placed at each signal. Thus the crew gets data continually.

Located at the signal toward which the train heads is a code transmitter. This electro-mechanical device applies short pulses of electrical energy to the transmission wires with a Morse telegraph key. But while the telegrapher depends on dots and dashes with a time signal between them, the signal code transmitter works continually, producing only dots. Its data is interpreted by counting the number of dots per minute or the rate of coding.

For instance, if you want to transmit red, yellow, and green signal indications, your code transmitter applies 180 dots per minute for green, 120 per minute for yellow, and no code for red. If additional indications (approach medium, medium clear, etc.) are required, additional coding rates are used.

On the train, in front of the forward-most locomotive wheels, is situated a pair of wire coils, one above each rail. Although they don't make physical contact with the track, an electro-magnetic interaction causes the electrical dots in the rails to produce similar dots in these coils. Electrical decoders translate this data into color signals displayed to the engine crew.

The list of roads which use this system includes the Pennsylvania, the Chicago & North Western, the New Haven, and the Canadian Pacific.

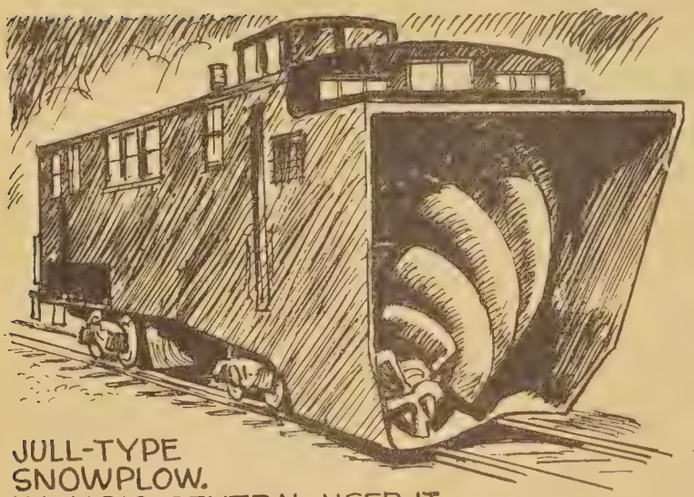
The continuous inductive system costs more than the intermittent inductive system but allows more flexibility and is especially useful for dense traffic.

By using continuous inductive cab signaling as a basis, engineers at the big signal companies today are busy designing automatic equipment that will run a train more efficiently than any engineman can run it—and safely—without human assistance!

But even after such equipment has been perfected it will face at least two major obstacles: labor's opposition and the initial cost of installation. ●

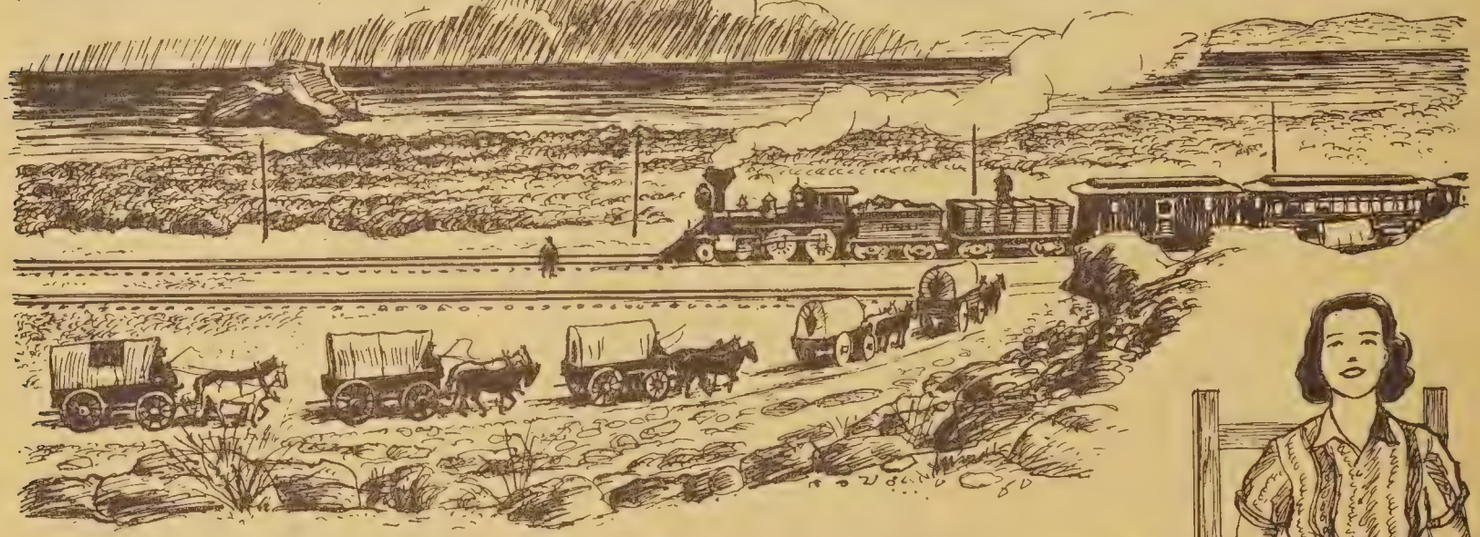
Along the Iron Pike

by Joe Easley



JULL-TYPE SNOWPLOW. ILLINOIS CENTRAL USED IT IN IOWA IN 1890'S AND EARLY 1900'S. (Drawn from photo by Arthur E. Twohy)

QUEENIE, ROCK ISLAND MASCOT, HAS BEEN AWARDED THE LASSIE GOLD MEDAL FOR SNIFFING OUT HOTBOXES IN TRENTON, MO., FREIGHT YARDS.

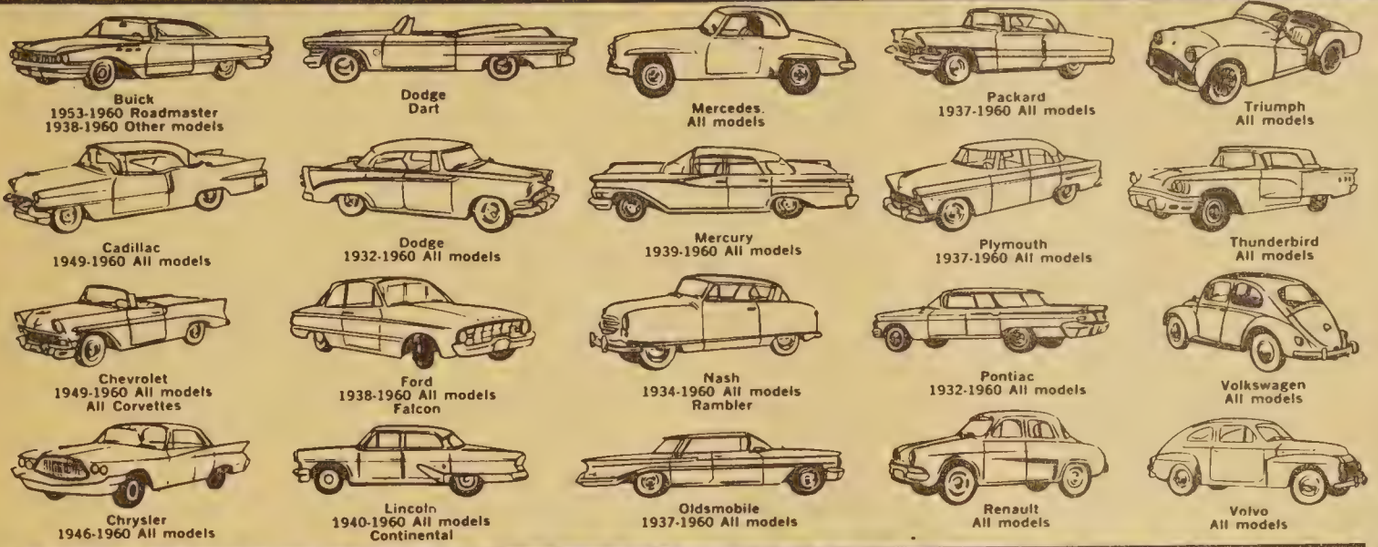


CENTRAL PACIFIC TRAIN EN ROUTE TO LAST-SPIKE CEREMONY AT PROMONTORY, UTAH, MAY 10, 1869, PASSES A WESTBOUND "WAGON TRAIN" AT GREAT SALT LAKE. (Drawn from historic photo in Southern Pacific collection)

THE *TALIESIN*, A DOUBLE-ENDED FAIRLIE TYPE BUILT IN 1885, REBUILT IN 1956, RUNS ON OLD FESTINIOG RAILWAY IN WALES DURING TOURIST SEASON. (R.J. Sandusky, R.R. 2, Brampton, Ont., Canada)

GAL PULLING MAIL TRUCK IS JERRY THOMAS, C&O TICKET CLERK AND STATION HELPER AT WHITE SULPHUR SPRINGS AND RONCEVERTE, W. VA. (Chessie News)

IF YOUR CAR IS AMONG THOSE BELOW...



YOU MAY BE $100 RICHER IN THE NEXT TWELVE MONTHS

ONE HUNDRED DOLLARS richer, we say! And all you have to do (if your car is among those above) is to TAKE THE SPARK PLUGS OUT OF YOUR CAR — to quickly unscrew those outmoded, money-eating, gas-consuming spark plugs and just as quickly replace them with the big fat flame of the future—the LECTRA FUEL IGNITER!

"Remove my spark plugs?," you ask in amazement. "Replace them with Fuel Igniters? Why should I? What's wrong with my spark plugs?"

There! That's the $100 question. That's precisely the way to pick up the good round sum of $100.00. And to answer this $100 question we are pleased to present Col. Fred P. Dollenberg, graduate engineer, flying hero, one of the first to personally pilot Gen. Douglas MacArthur, and developer of the LECTRA FUEL IGNITER.

by Col. Fred P. Dollenberg

If you are prepared to take those obsolete spark plugs out of your car—you will receive in the next few days a package containing the invention that the automobile world is buzzing about—the package that will make you $100 richer in the next 12 months. You will open the package and go out to your car. You will unscrew the 6 (or 8) spark plugs in your engine and quickly screw in the gleaming Fuel Igniters you've just received. All this will take a few minutes.

You will then get behind the wheel and turn the starter. What will happen next is what excited U.S. Navy and Air Force pilots and brass, who were the very first to be let in on the successful development of the LECTRA FUEL IGNITER prototype. And here is what will happen:

INSTANT START — SUPER POWER

At the touch of the starter your engine will leap into an instant roar, then immediately settle into the even, deep purr of true engine health. (This will occur no matter how icy cold the weather.) Then you will shift into drive (or into gear for non-automatic tranmissions). Without touching the gas pedal your car will begin to move forward—maybe 6 miles an hour *on gas you're not even giving it—on gas you've hitherto wasted!* Then you'll press the accelerator and your car will *leap* forward. We are not using the word "leap" idly. In split seconds you will be racing swiftly down the highway. Why? Because almost 30 more horsepower will be pulling your car . . . from 150 to 300 RPM (revolutions per minute) have been added to your engine! You'll come to a hill and you'll accelerate without a falter. If there is passing to be done those extra horses will do it with safety and assurance. You'll come back to your garage and sit back and glow from the experience you've just had, not even equalled when your car was brand new.

LET YOUR OWN MECHANIC TEST IT .

But don't be content with only this, please. Unscrew one of the LECTRA FUEL IGNITERS and take it to your own service station. Ask your mechanic to test it. Let him pick his very best spark plug for the same test. *Tell him that if the spark plug he has chosen for this test can get the better of our Fuel Igniter we will give him our check for $10.00!* The needle of his tester will tell you the story. Your own eyes will see the BIG FAT FLAME still firing when the skinny spark of the spark plug has long since died.

But there's so much more to the story! What is wrong with the ordinary spark plug? Why hasn't it been improved in 40 years? What is the LECTRA FUEL IGNITER? WHAT MORE WILL IT DO FOR YOU?

The problem is basically simple. An engine provides power for a car because gasoline, sprayed into the cylinder, is ignited by a spark. When ignited the gasoline burns, pushing the piston down into the cylinder. The more complete the burning of the gas, the more force in the cylinder. More force—more power. Obviously therefore, the larger the spark, the more completely is the gas ignited and burned.

But the spark plug gives a *skinny* spark, a *tiny* spark. It can't ignite enough gas. It is estimated that only 1/5 of your gas is burned from spark plug igniting. It sounds crazy but it's true: 80% of the gas you buy goes out of the exhaust in moisture—wasted, unused gasoline! It's bad enough to throw away 80c of every gas dollar—it's even worse when you're paying *super prices* for *super gas*. Why super gas? For the simple reason that the incomplete combustion caused by conventional spark plugs builds up glowing carbon and metallic deposits. These deposits cause detonation and damaging engine knock with ordinary gas, wasting power, wasting gas and building up further deposits to shorten the life of your plugs *and* your engine. Do you want to prove to yourself the truth of our statement about gas waste? Then ask anyone—absolutely anyone—who drives a car with igniters. He will show you that his exhaust pipe is immeasurably cleaner than yours. No smoggy, dirty, wasteful, unhealthy gas waste choking up his tail pipe.

NEW BASIC DESIGN

Well, why can't a spark plug give a fatter, bigger flame? Because of its BASIC PRINCIPLE AND DESIGN! Every spark plug has an air-gap—.025 to .035 of an inch. The spark can be no bigger than the gap. No bigger? Only when the plugs are *brand new* do they give a spark even as big as the gap! If you were to replace your spark plugs every month of the year you'd be pretty sure of getting a spark 25/1000th of an inch. But what is actually needed is a spark twice as fat and long. The LECTRA FUEL IGNITER does give a spark more than twice as big. It will not allow all that precious gas to run out of the exhaust unburned. It will capture unburned gas for you, and turn it into power instead of wet smoke. Do you see why your engine suddenly receives 150 to 300 more revolutions

(continued on next page)

RECORD OF PERFORMANCE — LECTRA FUEL IGNITERS

NOTE—All Lectra-equipped cars in these tests used REGULAR GAS
(compiled from survey reports and field tests)

YEAR	Make of Car	Spark Plug Miles Per Gallon	Lectra Fuel Igniters Miles Per Gallon	Miles Increase	(Gain) Extra Miles Per Gallon
1956	Chevrolet V-8	17.7	22.2	24%	4.5
1959	Oldsmobile	17.1	20.3	18.7%	3.2
1955	Nash Rambler	20.0	27.6	38%	7.6
1954	Plymouth 6	22.2	26.0	17%	3.8
1955	Ford Fairlane	14.0	21.2	50%	7.2
1957	Chrysler Windsor	16.5	21.0	20%	3.5
1958	Pontiac	15.6	19.1	22.4%	3.5
1954	Oldsmobile 98	15.5	18.0	14%	2.5
1957	Dodge D-500	16.0	21.5	35%	5.5
1951	Buick Super	13.0	17.0	22%	4.0
1958	Chevrolet	16.9	23.8	40.8%	6.9
1956	Plymouth V-8	16.0	20.0	25%	4.0
1955	Oldsmobile 98 (air-conditioned)	15.0	20.9	40%	5.9

All above figures confirmed by letters and reports available from our files in New York City.

per minute? Isn't it apparent now why 30 more horsepower is suddenly put into your engine . . . why you start faster, accelerate more swiftly?

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ABOVE is a table compiled from survey reports and field tests. Read it. It will amaze you:

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Student

by HARRY BEDWELL

RAIN lashed the yard as Mel Hatch rode a switching engine to within ten feet of the roundhouse, where she turned off. Snug in slicker and boots and rubber hat which he had bought cheap from a boomer switchman, Mel exulted in the storm. The garments were a bit too large even for his chunky build but they sure kept out the weather.

Mel was a young student brakeman. He'd just given up a job of herding cattle on a Texas ranch and come out to California to go railroading, and was lucky to be called off the board for Forty-two on a night like this. There wouldn't be so much work along the way—or so he thought.

"Compound engines and simple engineers," he murmured in a singsong tone. "Damn sight better'n feedin' a bunch of steers."

Slanting rain reflected the green and red of switch lights in long streamers. The clang of engine bells was muffled. A solid train of refrigerator cars loaded with fruit from the Imperial Valley pulled out of the east end of the yard, the white lights of an extra dotting her head end.

A hostler piloted No. 929 through the switches and tied her onto Forty-two. Mel climbed into the cab and waited. It was cozy there, with steam hissing and the injector throbbing.

The conductor came forward through the drifting sheets of water, his lantern a dim speck of light. He crawled under the storm curtains into the cab and took off his dripping rubber hat. He dried his hands with a blue handkerchief. Then he brought the train orders from an inside pocket, handed copies to the engineer, and they read them together.

Mel listened to the mumble of voices as the two men checked and discussed the orders.

John Marshall, the conductor, was heavy-shouldered and deliberate. They said he could run his train the entire length of the division with six words and ten signals. He was hard, but reasonable, and Mel liked him. Nick Stoddard, the engineer, could cajole the junkiest engine into a fine perform-

Brakeman

A condensed RAILROAD classic
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ance. With a Mallet like the 929 he worked wonders.

There was a flock of tissues, for the roadbed had softened under the rain and shot all schedules. Speed limit was reduced to thirty miles an hour for all trains over half the division, and in some spots to twelve miles.

Mel found it sheer delight to listen to these two veterans plotting a course through the storm, mindful of the two-way traffic on that single ribbon of steel spun out there ahead in the darkness.

"The dispatcher says his wire has gone out twice already," Marshall said as he folded the tissues and stowed them in his pocket. "It will likely go out again, which means a bunch of delays."

"We'll get through," Stoddard decided cheerfully. "Dispatcher gave me a memo of the number of cars in all the freights we'll meet. We'll have to do some flagging to move at all, and look for seesaws on the short sidings. Extra 926 is ahead of us, solid perishables, but they can't make any better time than we can tonight, so watch out for them."

The skipper nodded. "Let's go."

MEL ran forward to the switch-stand. The great Mallet stamped and the drawbars muttered. Forty-two moved out onto the main line.

Comfortable in his cab, watching the rain flash in the long headlight beam, the hogger cast a faint shadow against the farther drenched window. The fireman mended his fire intently.

A good place to be and swell guys to work with, Mel pondered. Something about the rattle and roar of rail traffic on the Empire Line seeped into your blood and made you want more.

He could feel the soft spots in the track by the quick sidewise dip of the Mallet that sometimes threw him against the boilerhead.

Switch-lights of a blind siding nodded to them and hurried by. Forty-two followed the cone of her headlight through churning darkness. Station and yard lights burnt palpitating holes in the black wall ahead. Stoddard eased his throttle, and his whistle screamed.

In order to take siding for Seventeen, they crawled into the passing track before the station. The night operator, Eddie Sand, was lounging at the telegraph table under a shaded lamp. The conductor joined him, then came forward and ducked under the storm curtains. Mel Hatch watched and listened.

"The wires are out again," Marshall explained, "so we've got to take it as it comes, without help from the dispatcher. Eddie says Seventeen was about on the time we have on her the last he heard. He got this order for us before the wire died, giving us an hour and thirty minutes more on Sixteen, so we won't have to look out for her on our tail for a while."

Mel opened a half-inch crack in the cab window and bent an ear to listen. He'd often heard Eddie Sand's name mentioned, with a sort of awe, and was thrilled at having glimpsed the famous boomer himself through a wet windowpane. The rain drummed ceaselessly. A faint moon throbbed in from the night; light flared in the east. Mel slid to the deck and reached for the grab-iron.

"Watch yourself, Hatch," Marshall warned. "Don't go near that switch till Seventeen has passed."

Mel nodded and waved, and stood by the pilot of 929. Seventeen's whistle howled as the engineer asked for the board. The station semaphore light flashed from red to green. Mel twisted a highball with his lantern.

He heard the hoghead shut off, and then the clatter of wheels, the clank of side-rods, and the snarl of leaking steam as Seventeen rolled by. At first the stack was silent, but pretty soon he heard quick barks of the exhaust, and the dimly-lit coaches slid under the order board. Everybody was being careful that night.

FORTY-TWO crawled back onto the main line and chuffed along the path her headlight blazed. They had a meet with Forty-one, engine 918, at Mercer. Rain nearly blinded the headlight as they pulled up the main line past the

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west switch at that blind siding. They were prepared to stop when Forty-two was in the clear between the two switches, so as to let Forty-one through the siding.

The slow dip of a soft spot in the track tipped the 929 in a dizzy lurch. The engineer slowed to a crawl. Air sizzled as he pushed the handle over gently. The momentum died and Stoddard slid his window open to peer back into the murk.

"That soft spot put something on the ground," he said, blinking. "Better run along back and see what it is," he told the student brakeman, and whistled out a flag.

Mel snatched his lantern. He inspected the car trucks while making his way back along the train.

Ten cars from the engine he found a derailment. Both trucks of a heavily loaded flatcar of steel were on the ties; so were the front trucks of the following boxcar. Mel felt shaken. This was a wreck! Disaster had swooped and struck from out of the storm.

Conductor Marshall arrived at his deliberate walk. Squatting in the mud, he examined the derailment, moving his lantern about, checking without haste. Part of the roadbed had been washed out from under the track for a few yards. The car of steel had dropped from the spread rails, had bent one outward and twisted it, and had broken the ties.

"It will take the big hook to handle that," Marshall said.

The big hook—the wrecking crane! This was bad, Mel reasoned. They'd have to sit here with the main blocked till they could send out word and get the wrecker in. Marshall stared into the rain. Mel could feel him sifting the emergency through his mind.

Then came a quick decision. "The caboose don't quite clear the west switch. Cut off your engine and bring her around through the siding. Move now, because Forty-one may show any time."

Mel ran forward, his oversized boots slapping in the ankle-deep water. He cut off the Mallet and climbed into the cab to inform Engineer Stoddard. They backed the engine down the siding and eased up just short of the caboose, whose rear trucks were barely inside the switch points.

Marshall had brought out a pinch bar. "Watch the hand brake," he ordered Mel, "and stop the crummy when she clears enough for the engine to pick her up."

This is an exciting adventure like you read about in a book, the former cowhand was thinking exultantly.

MARSHALL propped the coupling lever and hunkered down between the cars. He thrust the point of the heavy bar under a wheel and pried. The caboose moved and Marshall followed, sliding the bar along on the rail under the wheel, working it up and down. The caboose slid away quickly. It cleared the switch and moved on into the darkness.

On the skipper's signal, Mel checked its speed with the hand brake. The conductor opened the switch and headed the engine through to pick it up. They brought the caboose back through the siding and coupled it onto the head end.

"That," Marshall nodded, "will let the rest of them by us."

They waited in the cab for Forty-one to show. The rain washed over them in sighing gusts. Mel quivered inwardly with excitement, but these veterans showed no anxiety at all. Conductor and engineer conversed in slow, thoughtful tones. Marshall wrote a message to be carried out by Forty-one.

Mel felt the situation tighten about him. The long train lay like a log stranded in the storm, and these two men discussed the hazards and delays as if they were mere items of routine operations.

Forty-one called from the storm. Mel and his conductor splashed over to the switch-stand. They signaled her into the siding. The engine clattered over the points and steamed slowly down alongside Forty-two. The caboose came up and stopped in the clear, and the skippers conferred. The two headlights thrust bright needles into the welter. Tail-lights and switch-lights made winking splatters of color.

"Pick up my brakeman who is back there flagging," Marshall said, "and take him to the first telegraph station. Tell him to get this message to the dispatcher, if the wires are working again. And be sure he understands that he is to stop everything and give them the situation clearly before he lets them proceed. The main line is blocked, but they can get through the siding."

Mel and Marshall splashed back to the cab of 929. The conductor studied

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the memorandum the dispatcher had given him before he left Medora.

"That Extra 922, west," he said, "will have time to get to Sand Slide against us. Forty-one's conductor says he met the 926, that hotshot ahead of us, at Sand Slide. He says he'll wait there for the 922. If we don't show up within the next hour that will stick them both for Thirty-one, and there isn't room on that passing track to clear either one of those freight trains."

"Which means," Stoddard figured, "that if we go on up to Sand Slide with all our train, except the derailed cars, we'll have to meet Thirty-one there too, and we'll be seesawing her by for the rest of the night. Think we ought to wait here for Thirty-one?"

The conductor brooded. "And hold Extra 922 till we get there? It might be a good idea to cut off our engine and go up to Sand Slide light and bring the 922 back ahead of Thirty-one. He can go on through, and we'll wait here for her then. What say, Nick?"

"Would save time for the 922 and Thirty-one," the hogger said. "Let's go!"

MARSHALL studied his student brakeman. "I guess I'd better go up with the engine," he said, "in case it don't work out the way we've planned. Mel, you stay here with the train. Go down to the west end and open that switch. Leave this one closed, because we'll likely come back with the light engine ahead of the 922."

He turned to go, changed his mind, and added: "Look, cowboy, both switches have those old Hayes automatic derailers attached and I wish you'd check each derail closely every time you turn a switch, because they're old and cranky. Understand?"

"Yes," Mel said, "I do."

"Okay. Then get out the markers and hang 'em on the tender."

The student was aware that Marshall's eyes were still upon him as he stepped to the gangway with the marker lights in hand. The 929 coughed and slid away into the darkness. Mel was left behind with his responsibilities.

He hurried to the west end of the siding and opened the switch, which Forty-one's brakeman had closed. He locked it open. Then he inspected the automatic derail and verified the fact that it was off and wouldn't let anything on the ground that came through the siding. He kicked it once to make sure it was secure.

Here he was, in charge of hundreds of tons of goods and equipment, some of it on the ground, alone in a vast field of rain and darkness, with nobody to appeal to in case of a new emergency.

He'd heard Mr. Marshall tell Forty-one's conductor to order his rear brakeman to leave a red lantern and to set torpedoes when Forty-one picked him up. Mr. Marshall himself was up front for protection. That ought to cover the safety factors. But you couldn't be sure.

Mel climbed into the caboose. Reassurance came back in its shelter. He took off his slicker, stirred up the fire in the stove, and put on a pot of coffee. Shucks, he'd make out all right!

The wind sobbed; rain washed over the caboose. A crummy was a slick place, and kind of mysterious, he thought, with the cupboards and lockers full of equipment which he didn't know much about. First time he'd ever had a chance to explore one without the conductor or the parlor man present.

"Compound engines," he hummed, and swung up into the cupola.

Ahead, beyond the window, was a drenched black void with a splash of emerald at the east switch. He whistled as he lounged into a chair and swung around for a glance to the rear.

Then, slowly, the whistle died. His eyes seemed suddenly welded in their sockets. Cold shivers wriggled through him. *That light on the west switch-stand was green, too, instead of red!*

Something screeched out there in the wet darkness. He tried to check things deliberately. If that switch were open, as he had just left it, the light facing him should be red. Wasn't that right? He glanced at the east end of the siding. Sure. That switch was closed and the light shown green.

MEL HATCH didn't bother with the iron rungs of the ladder in his descent to the floor. He merely slid and fell. He picked up his lantern, his hat, and slicker, and bolted.

The oversized rubber boots were hard to manage in a hurry. He stumbled and splashed a good deal, for he didn't take his eyes from the green light of the west switch. All the time he was afraid it would change again to red and yet he didn't know what to do if it did.

His breath got lost by the time he reached the switch-stand. That switch was sure enough closed—and locked!

Mel examined the light on its prongs atop the stand. It was properly set. He looked at the automatic derailer. The damn thing was set to let the first pair

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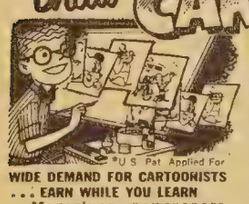

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of wheels that struck it off on the ground. Yet just a while ago he'd locked that switch open!

It was one of those things that just couldn't happen, but there it was. This seemed like a nightmare.

Turning back to the switch-stand, he stumbled over something that tangled his feet and stung his leg through the rubber boot. It was a two-foot length of barbed wire. He slipped the wire through the iron loop, along with the switch lock, twisting it hard.

Then he waded back to the caboose, dried his soaked hair with a towel, combed it, and warmed himself at the fire. He chuckled and hummed. The onetime ranch hand had confidence in barbed wire. That was something he did know about.

Climbing to the cupola, he glanced cautiously at the west switch. A red eye still splattered the darkness. That wire'd hold it!

Presently a deep-throated whistle mourned in the distance and then a headlight shimmered. The outline of the 929 showed in its flare as Forty-two's engine backed down onto her train, followed at a distance by Extra 922.

Mel got his slicker and went out as 929 eased up to the caboose. Three dim figures came from under the storm curtains of the cab. Mel identified them in the flickering light as Mr. Marshall, Trainmaster Carlin, and the trainmaster's assistant, Vic Blalock.

BLALOCK peered at him. "Oh, it's you," he said coldly.

"Everything okay?" Marshall asked.

Mel gulped. "Yeah, I guess so."

He moved on to the east switch and opened it for the approaching Extra 922. He glanced at the west switch again. It was still crimson.

Tying down a switch with barbed wire might not look so good to the trainmaster, if he should see it. That wasn't standard practice. He'd better attend to that wire before somebody else discovered it.

Marshall and the other two were moving along Forty-two's train toward the derailed cars. Number 922 came slowly down the main line and swerved over to the siding, chugging on an easy throttle. Mel swung his lantern at her encouragingly. As she nosed up he mounted the pilot step. He'd ride her down to the west switch, disengage that barbed wire, and toss it into oblivion.

His lantern gave a slow signal to the engineer. They passed the three men headed for the derailed cars, and Mel caught a quick glint of Carlin's eyes. It wouldn't be easy to explain if Carlin should question him.

The rain checked suddenly. That headlight above him blazed the way along the siding as Extra 922 rolled slowly. The red switch-light swung forward and drew up close. He prepared to unload and reclaim the telltale piece of barbed wire.

Then something peculiar drew his eyes to the derailer. He leaned forward and nearly lost his hold on the pilot beam. The derail was on, ready to let the 922 off onto the ground. And yet the switch-light was red!

Mel yelled. He fluttered his lantern up and down in a quick stop signal as the derailer drew up under the pilot nose. He leaned back from that unpredictable device, waiting for the grunt as the locomotive left the rails.

AIR sizzled under the engine as she stopped. Mel stared down at the derailer at the tip of his boots, and then at the red switch-light.

The engineer hung from his cab window and blared: "What in hell's the matter. You got the wingdings?"

But the student couldn't answer. The entire mechanism of switch and derail was bedeviled. Some diabolic power must have crossed it all up.

Rubber boots thumped as Marshall and the two trainmasters splashed around the head end of the 922. They stared at Mel Hatch. They stared at the switch-stand and the points. Mel eyed only the derail, as if he expected the thing to jump up and bite him.

Carlin stooped and held his lantern beside the derail for a close inspection. After that he gave Mel a searching look and walked to the stand. Marshall and the assistant trainmaster followed. They examined the points, the stand, and the light. Then they stared at Mel.

"Come here, Hatch!" Carlin bawled.

Slowly the student dislodged himself from the pilot and moved forward.

"There's an explanation for everything," Carlin said. "There's got to be. Now, Hatch, take it easy, and tell us what happened."

Mel looked up cautiously. He tried to talk slowly and keep the facts in sequence. But he realized he couldn't make them seem authentic.

"It's all screwy," he finished. "I thought at first mebby I hadn't opened the switch. But now I know damned well I did. The second time, I tied it

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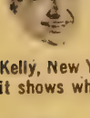

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down with barbed wire because I'm used to securing things with it. But I never touched the light."

"Better cut off the 922's head man and give him to Marshall," Blalock suggested. "We'll take Hatch on in so we can keep an eye on him."

"Yeah?" said Carlin. "Fix that lamp so it shows right," he told the 922's head brakeman, "and open the switch."

That crazy refrain ran through Mel's mind again. "Compound engines and simple engineers. Damn sight better'n feedin' a bunch of steers." The bright interlude of life on the iron highway was melting away in the rain.

Then Trainmaster Carlin said, "This isn't settled yet."

The student, reaching for the top of the switch-stand to reset the light, yelled suddenly: "Hey, what are you doin'? Le' go me!"

A ramshackle shape flung itself out of the storm and plucked Mel Hatch from the stand. The two figures mingled and slipped and swayed. Carlin reached out powerful hands and tore them apart.

The disorderly menace chattered: "You stop! You no move da light!" The creature tugged in the trainmaster's grip and muttered gibberish.

CARLIN snapped, "Give us a light so we can see his face."

The brakeman raised his lantern cautiously. It revealed a long, sad visage.

Carlin demanded, "Who in the hell are you?"

The man said: "Me walka da track. Me fixa da light. You let 'um be."

Carlin grunted: "I'd never died happy if you hadn't come along. Now," he ordered the gaunt creature, "you get back to your shack and don't come out till the section boss says so."

The loose-jointed man ambled back into the storm, giving out queer sounds.

Conductor Marshall said, "I still don't know what happened."

"It's not so hard to figure, John," Carlin said quietly. "That lug is related to one of the gandy dancers. He's probably just over from Europe. He'd been eating off his kin, so when this track-walking job opened, the kin saw that he got it."

"But what happened tonight?"

"I guess," Carlin brooded, "they had a time hammering it into that guy's head how he should keep the switch-lights cleaned and filled and put back right, so he wouldn't set the lamps wrong. But he got even that twisted. He thought nobody ought to monkey with those switches but him."

"But listen, Sam," the conductor pleaded, "why was he out here tonight?"

"He lives in a shack over there where you see that light," the trainmaster answered. "Maybe he was sitting up with a toothache. And when that west switch-light showed green to him, instead of red, and stayed that way, he figured he ought to correct that."

"He would have a switch key, of course," Marshall injected.

"Yes, and he comes over and shuts the switch. When Hatch opens it again, the lug comes back to repeat. But that length of barbed wire threw him off. He changed things around to suit himself, and wound up with this setup."

The conductor studied the trainmaster shrewdly. "I've noticed," he said, "that these fellows who get their jobs through being kin to somebody don't usually come out so good."

Carlin nodded. He turned on Vic Blalock. "Marshall can switch the rest of his train out from behind those cars on the ground, and move on now," he said. "He hasn't got a hind brakeman, Vic, so you'd better go along with John in the hind man's place. The experience'll do you good. And," he rubbed it in, "if you get stuck, Mel Hatch will be glad to help you out."

"Well," Blalock hesitated. He eyed the ring of faces through the drizzle. "Well–I guess I could do it."

The group disintegrated. The extra's head brakeman opened the switch. Lanterns flicked peremptory signals. The 922 took a heavy stride and the chuckle of drawbars fled down the train. She stamped again, and the long string of cars began to roll. The engineer shut her off for a moment and leaned out the high cab window.

"Hey, stinger!" he called. "Next time you want to stop quick, don't signal like you been hit by lightning. Give it to me in swipes."

"Next time," Mel grinned in ecstasy, "I'll write you a letter."

He understood the meaning of the term *stinger*, and Mr. Stoddard's crack made him very happy. A *stinger*, the ex-cowboy knew, was a brakeman, a real brakeman. The word came from the large initial B (bee) on the coat-lapel button he'd seen on members of the Brotherhood of Railroad Trainmen. It never applied to a mere student.

Mel pitched his voice and sang to the wind. He knew now where he belonged. The high iron had him for sure. ●

Books of the Rails

HARRY BEDWELL: Last of the Great Railroad Storytellers, by Frank P. Donovan, Jr., introduced by Robert S. Henry, 119 pages, Ross & Haines, Inc., 413 S. 4th St., Minneapolis, Minn., $3.75.

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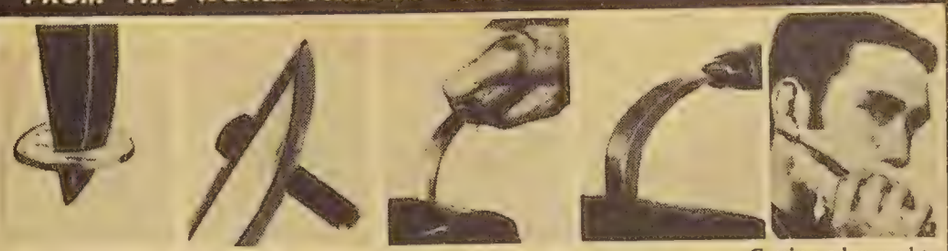

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As I write this, I am receiving as many as 1,000 cash orders a day for imported clocks — all by mail order. They cost me only 63¢ and I sell them far below the U.S. market — a terrific bargain and a wonderful seller. And, I don't stock them as they are shipped direct to the buyers from abroad, *after I receive the cash.*

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Mrs. McGinn, one of my students in Illinois, operates a gift shop and sells Arabian perfume by mail order. F. Basler, N. J., sells Aztec bird feather pictures from Mexico to stores and by mail order.

You might ask, "Why do you let others in on your plan? Why don't you keep it all for yourself?" The answer is that items for import are countless. No one person could possibly handle even a small proportion of them. There's plenty of business in import-export for you and me and many others.

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there for fourteen years," the boomer mused, "and during all the while you've never encountered much beyond this desk. . . . You've never heard the Feather River go raving mad down there a thousand feet below the high iron. You've never listened to the big jacks snarl coming up to Arkansas Junction, where the line slips off to climb to Leadville. You don't know the smell of magnolias on a wet night down South nor the tang of the North Woods when they drip with the night fog."

Harry had imagination, and Frank Donovan has done him full justice. The book includes 16 pages of photographs —people and places in the boomer's career. His birthplace, various stations where he worked, portraits of Bedwell himself, the two women he married, and so on. While reading this biography you'll feel that you've met Harry Bedwell somewhere along the boomer trail.

STEAM'S FINEST HOUR, by David P. Morgan (editor of *Trains* magazine), 128 pages, supercoated paper 16x11" horizontal, Kalmbach Publishing Co., 1027 N. 7th St., Milwaukee 3, Wis., $15.

For sheer magnificence, this is the book to end all steam-photo books. It offers 101 detailed pictures of North American locomotives, all fairly modern, with 20,000 words of informative text. The vast page size gives panoramic sweep to builders' photos as well as action shots, especially the end-paper study, 32" wide, of a Nickel Plate freight-hauler belching gray smoke. Some future day, when a little boy asks, "Grandpa, what were steam engines?" you'll be proud to show him your copy of *Steam's Finest Hour.*

O. & W.: The Long Life and Slow Death of the New York, Ontario & Western Ry., by Wm. F. Helmer, 210 pages plus pocketed map and profile, Howell-North Books, 1050 Parker St., Berkeley 10, Calif., $5.

O & W. rates a special award for the number, high quality, and variety of its illustrations. There are 140 good pictures, a colored frontispiece, maps, timetables, equipment rosters. The two photos we find most exciting of the lot show clearly (a) an engine buried in snow above her boiler top and (b) the splintered interior of an immigrant coach partly telescoped by a locomotive.

The reading matter also is distinguished. *O. & W.* was authored by a man, obviously fascinated by his subject, who knows how to write, who weaves lively anecdotes into essential facts. But he states at the end, "the 544-mile pike was auctioned off piecemeal," without saying who got which pieces. Many of us would like to know.

LOUISVILLE & NASHVILLE STEAM LOCOMOTIVES, by Richard E. Prince, P.O. Box 724, Green River, Wyo., 128 large pages, 240 photos, 50 charts, maps, and diagrams, $6.

Mr. Prince was too modest in titling his book. True, it deals mostly with steam power, but he also gives a capsule history of each of the many roads that make up the L&N system. If you like steam—and who doesn't—you'll go for this book in a big way.

Builders' photos, action shots, timetables, detailed accounts of loco types and classes—it's all there, the story of "Old Reliable" steamers from the first one in 1855 until the last fire was banked Nov. 3, 1956. Books such as this one will be treasured more and more as the years come and go.

CAB-IN-FRONT: The Half-Century Story of an Unconventional Locomotive, by John B. Hungerford, 36 pages, paperbound, Hungerford Press, 6851 Reseda Blvd., Reseda, Calif., $1.50.

The choice of subject, the expert way it is handled, and the impressive array of really good pictures, plus rosters, are almost certain to make this attractive little book a sellout.

BULLETIN No. 101: Pioneer Locomotives of North America, by Robert R. Brown, 91 pages, illustrated, The Railway & Locomotive Historical Society, Inc., Baker Library, Harvard Business School, Boston, Mass., $2 to members, $3 to non-members.

The author must have done a tremendous amount of careful research to amass all of this interesting and dependable data, which every railroad reference library needs.

Steve Maguire's TRANSIT TOPICS

EFFORTS are being made to reopen for rapid-transit service part of the New Haven Railroad's Old Colony Line between Boston and Braintree, Mass., modeled after the Highland extension of the Boston Metropolitan Transit network that is doing so well.

Steve Maguire

Elsewhere, the Pennsylvania Legislature has just passed a bill creating an Allegheny County Transit Authority to acquire rail and bus lines in the Pittsburgh area if its findings should warrant their integration into a single unit.

The goal is efficient mass transportation. While a rapid-transit plan *may* develop in Pittsburgh, the new TA is more likely to convert all or most of the existing rail lines to buses, which would give the city a maximum of about 5 more years of rail-transit service.

A similar situation exists in Los Angeles, where the LAMTA, that took over the lines ostensibly to provide better rapid transit, is doing little except to give out publicity releases on monorail and other visionary schemes, meanwhile running into the ground the best possible route, the one to Long Beach.

After a quick hearing in the nature of a kangaroo court, local service to Watts on the Long Beach rail line was abandoned last November. Weeks before the hearing, bus schedules had been approved and bus drivers trained for them.

One reason given was defective wiring on the center-door cars built in the mid-1920's. Instead of rewiring the cars at $2000 each, the Authority bought new buses costing ten times that price.

On the remnants of the Pacific Electric interurban, cars are worn down to the point where the same thing is likely to occur there, too. Thirty PCC's, that LAMTA could have used, were shipped to Buenos Aires last summer. Those cars, built in 1940, replace all older types on the General Urquiza RR., running along with two other ex-PE cars previously sent there.

BOTH rapid-transit plans and railroads were hit hard in New Jersey

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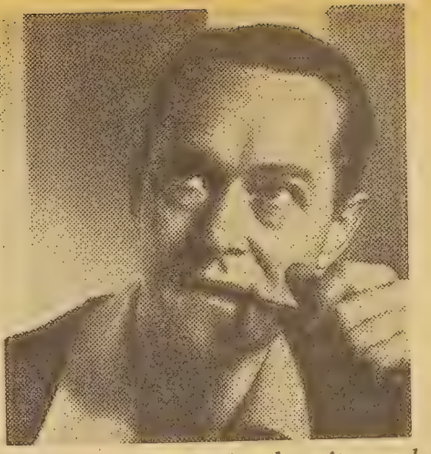

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elections last November, the move to use surplus turnpike funds to back future rapid-transit and railroad rehabilitation being beaten in a referendum. As a result, the state now has no plan for rapid transit to metropolitan areas of New York and Philadelphia.

Also, the railroads will get no relief from big losses on commuter traffic. Don't be surprised if they ask ICC for permission to abandon such service. That includes the Lackawanna, which takes 20,000 persons daily into and out of New York on MU electrics.

RIDERS on the North Shore Line into Chicago are in a similar plight. Last fall Paul C. Albus, the ICC examiner who heard voluminous testimony on the application of CNS&M to abandon its entire system, recommended that it go out of business as a hopelessly losing proposition.

However, seeking a way for operation to be continued, Mr. Albus suggested that abandonment be permitted only if the company would offer to sell the line for net salvage value to any prospective buyer. So the North Shore has set a value of $6,200,000, we learn from Alexander Darragh, Wilmette, Ill.

CHICAGO Transit Authority reports a sharp drop in net losses for 1959 over 1958 and a gain in the number of riders. Rapid-transit lines were the main reason for this. Buses lost passengers; rail service gained.

More riders plus profits may come from the newest CTA plan for a rapid-transit line in the median strip of Northwest Expressway to run from Rockwell and Diversey to a point near O'Hare Field and connect with Logan Square line. Virgil Gunlock, CTA chairman, says federal agencies building the freeway have agreed informally to the use of the median strip for that purpose.

TWO Canadian National diesel locomotives now run on the Niagara, St. Catherines & Toronto, thus hastening the end of electric freight on this former interurban line, writes Norton Clark, 29 Richardson St., Newton, Mass.

Passenger cars were scrapped despite fans' pleas to save them, especially car 83. No. 83 made the farewell run on an interurban line out of Toronto 30 years ago, and last March made a final passenger run on the NSTC&T.

THE TWO biggest trolley museums in the East, Seashore Electric and Branford, have been "modernizing." Both recently acquired double-ended trolleys from operating systems which they quickly put to use.

Seashore got Boston MTA car 5374, trucked it to Kennebunkport, Maine, on its heavy trailer, and has since been using it whenever bad weather kept the open cars from running. And Branford received car 357 from Johnstown, Pa., the smallest city in North America where trolleys are still being operated.

AMONG the many unusual services offered by trolleys in bygone days was hauling ice, recalls Ted Taetsch, 14218 Garfield Ave., Lakewood, O. He says: "I remember a large icehouse at Lake Quassapaug, Conn. A short spur connected it with the Waterbury-Woodbury trolley line. Usually the spur held an ice-car or two, painted pale yellow. An electric locomotive pulled them away. I'd like to buy or borrow a good photo of one of those cars."

A PUBLIC auction was held recently in Chicago of all equipment of the Chicago Tunnel Co. freight subway system, including nearly 40 miles of trolley wire, 82 electric locos, 1250 cars, and 400 tons of rail. Thus ended a unique operation under downtown city streets. It handled incoming coal and outgoing ashes from powerhouses of office buildings plus miscellaneous freight in and out of hotels and big stores. The buildings had sidings in the sub-basements. (See article in Jan. 1950 *Railroad*.)

LAST tram line in Tasmania still operates in Hobart, the capital, but under threat of conversion to buses, laments Robt. Young, Box 2266, G.P.O., Sydney, N.S.W., Australia. Bob is editor of *Electric Traction*, a 20-page illustrated monthly.

A LIST of cities which at one time had cable street railways comes from E. Harper Charlton, 5335 Lexington Ave., Los Angeles, Calif. It does not mention funiculars, or counterbalanced inclines, but only cable lines traversing city streets for all or part of the route.

Steve Maguire

Never again will you see Pennsy MU passenger car ramble along the old Camden & Amboy line in New Jersey, chartered 1832, part of PRR system.

Chicago, Cincinnati, Baltimore, Dallas, Denver, Grand Rapids, Kansas City, Los Angeles, New York, Oakland, Omaha, Philadelphia, Pittsburgh, Portland, Ore., Providence, St. Paul, St. Louis, San Diego, Seattle, Sioux City, Spokane, San Francisco, and Washington, D. C. Also Paris, London, Lyons, Edinburgh, Glasgow, Melbourne, Sydney, Dunedin, N. Z., and Glasgow, Scotland, which had an underground subway that was cable-worked from 1896 till it was electrified in 1935.

Who can add to this list?

PASSENGER service on the Camden & Amboy (part of PRR) ended last Oct. 23 when MU car 647 made its last trip over one of America's oldest railroads, between Perth Amboy and Jamesburg, N. J. The ancient road was chartered in 1832. Its northern end had been giving MU service of a round trip daily since 1939, with few riders.

New Publications

A DETAILED story of "Iowa Railway Historical Society," under that title, is contained in the Oct. '59 Palimpsest, 30 pages, illustrated with steam and traction pix, issued by State Historical Society of Iowa, Iowa City, in that state, available at 25c a copy but worth much more.

The author, Frank P. Donovan, Jr., has been writing for Railroad Magazine, off and on, since his first article, "1000 Miles by Trolley" (Dec. '37). In Palimpsest he deals with the longest trolley-museum operation on record, that of NRHS, Iowa Chapter, which has freedom of the Southern Iowa Ry. rails for its museum cars.

SAN DIEGO horsecar days are well covered in a 12-page article, "Horse Tails and Bob Tails of San Diego County," by Richard V. Dodge in Sept. '59 Dispatcher, quarterly publication of Ry. Historical Society of San Diego, 7861 Normal Ave., La Mesa, Calif. Covering 1886-'96 and including rare photos, a map, and a roster, it sells at 25c.

THE KENSINGTON LINE, by Leroy O. King, Sr., dealing with the Chevy Chase route of Capitol Traction Co., appears in the first historical bulletin of Washington Chapter, NRHS, P.O. Box 487, Ben Franklin Station, Washington 4, D. C. There are 12 pages, photos, map, and a roster. Price is 50c.

ALL-TIME detailed map of street and interurban lines in and near Pittsburgh is issued by Pittsburgh Electric Ry. Club, Inc., P.O. Box 832, Pittsburgh 30, Pa., timed with the 100th anniversary of the first horsecar line in that city. It shows all present trackage and all abandoned trackage of what is now America's largest trolley system. Price is 80c. Proceeds will be used to develop Arden Short Line, the club's trolley museum.

TRANSPORTATION BULLETIN for June '59, featuring "Trolley Parlor Cars of New England," by O. R. Cummings, is published by Connecticut Valley Chapter, NRHS, Warehouse Point, Conn., 16 pages with photos and roster, 50c.

Mr. Cummings is now writing the story of Shore Line Electric Ry., a Connecticut company, for publication in the near future. He seeks facts and good photos from readers. Address: 105 Theresa Court, Manchester, N. H.

A LONG list of color and black-and-white slides showing trolleys in northeastern U.S. will be sent free on request by Thirty-five Slides, Box 368 Mountain Falls, Colo. •

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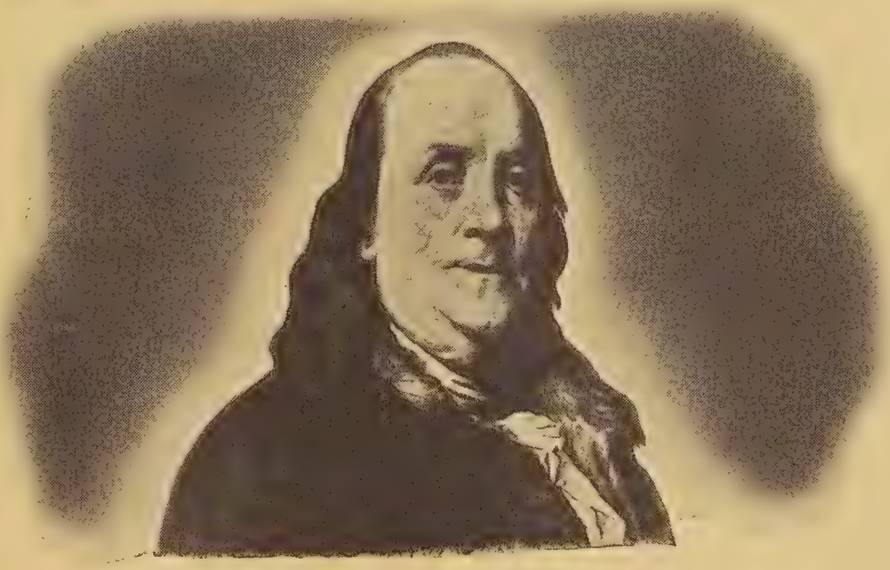

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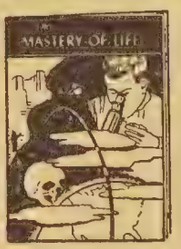

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Streetcars on Display

by HOMER G. BENTON

YOU MAY be surprised, as we were, to learn how many old retired street and interurban cars have been preserved as museum pieces in English-speaking North America, a number of them actually being operated today by juicefans over short stretches of gleaming rail.

That is fortunate. The public-service trolley itself is fast following the steam locomotive and the five-cent cup of coffee into the sunset. Its mileage in the United States alone has shrunk from more than 40,000, an impressive figure, to less than 2000.

Canada's situation is even bleaker. No city trolley operation there at all, aside from the handful of old cars used in Toronto rush-hour service.

The move to snatch trolleys from oblivion dates back to 1939, when the trend toward buses had become painfully clear. At that time a fan trip signalized the abandonment of the delightful Biddeford & Saco line in Maine and the fans decided to preserve the open car they were riding, No. 31.

Later that year a group of *aficionados,* including Steve Maguire, took a farewell excursion over the doomed Manchester (N.Y.) Street Railway and agreed to salvage No. 38, an old interurban car of that system, before it could be junked. As Steve recalls, Ed Maier of Manchester made the suggestion, his idea being to add the interurban to No. 31, then in storage at Biddeford, as the nucleus of a collection.

Years passed. The collection mushroomed into the more than 65 trolleys that make up the present Seashore Electric Railway, an operating museum at Kennebunkport, Maine. Meanwhile, other museums have been established. For example, 1940 saw the founding of the Connecticut Electric Railway, a juicefan setup at Warehouse Point, Conn., on abandoned trackage of the Connecticut Company. Its roster now has 16 cars.

In 1945, when the Connecticut Company gave up its Branford route, two miles of track were taken over by another fan group, Branford Electric Railway, a subdivision of the Electric Railroaders Association, which operates it today. Also founded in '45 was the St. Louis Museum of Transport, in which trolleys as well as steam locomotives are represented in its fine collection.

A year later the Central Ohio Railfans Associations set up an operating museum at Worthington, Ohio. The members run an assortment of city and interurban cars on several miles of abandoned interurban track, and this attraction, too, is worth visiting.

Early in '59 a group of fans organized what they call the Northern California Electric Railway and obtained trackage rights from the City of Colusa to run trolleys through the streets on week-ends and holidays over Sacramento Northern rails. This group will be in a position to form a large-scale operating museum if and when the SN, which owns the line, abandons it.

The newest trolley operating museum is being built at Glenwood, Ore., a 45-minute drive west of Portland, on the site of the great Tillamook fire of 1943 which put the Consolidated Timber Company out of business. This project, the Glenwood Electric Railway, is sponsored jointly by the Oregon Electric Railway Historical Society, the Washington County Park Bureau, and the State of Oregon.

"The Society," reports Secretary Roy Bonn, "is desperately short of funds to pay for transporting cars and equipment. Like other trolley museums, our work is done largely by members volunteering their services on week-ends and vacations. Further information may be obtained by writing to me at 411 12th Street, S.E., Auburn, Wash."

To outsiders, a budding trolley museum may look like a junk yard, but to the devotees working there it is a fulfiller of dreams, a project that one day will permit them to run their own trolley cars down Memory Lane, maybe with casual visitors paying fares for rides. The main problem is financial. Other obstacles include the destruction caused by weather and vandals. Protective shelters are needed; vandals must be curbed.

Among the nationally-owned exhibits at the Smithsonian Institution, Washington, D.C., is a Seattle cable-car. Four San Francisco cable-cars are held for various purposes by individuals in Los Altos, Roseville, and San Francisco, Calif., and Tacoma, Wash. The Witte Museum of San Antonio has the only museum cars to be seen in Texas.

Credit for preserving the oldest street railway car extant goes to the Museum of the City of New York for an 8th Avenue horsecar built by Stephenson in England in 1855. And on the barren top of Cajon Pass at Summit, Calif., where the thunderous exhaust of steam locomotives used to silence the bald eagles, Pacific Railway Society maintains in lonely splendor *Descanso,* the Los Angeles Railway's funeral car.

Mom and Dad can gaze at old trolleys and recall the age of leisurely living. Memories of bright August days. Rolling out to the country for a nickel fare with a picnic lunch to be eaten under the trees. Warm summer evenings. Young lovers on an open bench car, holding hands in quiet ecstasy, watch the passing lights and shadows play on each other's face. A gentle breeze is scented with pine, magnolias, or the salty ocean, or perhaps the smell of sizzling frankfurters and sugary hot popcorn. Boy and girl ride to the end of the line . . .

And winter time, ah yes! A streetcar follows a snow-sweeper through the glistening white city. Passengers share the warmth of a pot-bellied stove and eventually step off, one or two at a time, to vanish in the swirling blizzard. Mental pictures evoked by a visit to a trolley museum.

To popularize such museums we present a list of trolleys, interurban cars, and horsecars being held for historical purpose, the only comprehensive list of its kind we've ever seen.

This list is admittedly incomplete. We hope readers will add to it. We list each car number, the last company to operate it, the builder, and the date built. To have included every owner in the history of these cars would have overburdened the following list.

NOTES: (a) convertible, (b) Birney, (c) combination car, (f) freight or box motor, (h) horsecar, (i) interurban, (l) line car, (m) multiple unit, (n) narrow gage, (o) open car, (p) Peter Witt, (q) private individual owner, (r) Railway Post Office car, (s) single truck, (t) trailer car, (u) unknown or unsure of current status, (w) work car, (x) no trucks on car, (y) PAYE, (z) cable-car.

United States

CALIFORNIA

Berkeley—Bay Area Elec. RR. Asso.: Bamberger 400, Jewett '10 (i); Key Sys. 186, Bethlehem '37; 271, St. L. '01; 1001, Oakland Traction '10 (f); 1011, Oakland Traction '06 (q, w); 1201, Carter '95 (l,q); 1215 Key Sys. '29 (q), shop switcher; 1218, Key Sys, '29 (l,q); Sacramento Northern 62, Amer. '20 (b,s); 1005, Holman '12 (c,i); Salt Lake & Utah 751, Niles '15 (i, t), obs; San Francisco Muni 178, Bethlehem '23; 974, Market St. Ry. '31, Calif. type; Saskatoon Transit 12, St.L. '12 (b,q,s).
Buena Park—Knott's Berry Farm: Los Angeles Ry. 9320, Brill (o,x); four San Francisco cable-cars in use (u).
Burbank—Warner Bros. Studio: PE 538 (l).

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Colusa—N. Calif. Elec. Ry. Museum: Portland Trac. 4001, Kuhlman '28; 4011, Amer. '26; Key Sys. 987, steel city car.
Culver City—MGM studios: Pac. Elec. 994 (i) two Birney cars (u).
Los Angeles—Travel Town, Griffith Park: L.A. Ry. 536, St.L. '06, standard; 9317 (o,s), "Convent Special"; Pac. Elec. 1498, St. L. '04, (c,f,i); 1544, Cent. Pac. '02 (f); San Francisco 21 (z).
Perris—United Ry. Museum: Bakersfield & Kern 4, Holman '00 (s); Brit. Col. Elec. 1225, St.L. '13 (i); Key Sys. 167, Bethlehem '37; L.A. Transit 525, St.L. '06, Huntington std. type B (n); 1037 (b,x); 1057 (b,x); 1160, Amer. '99, Calif. type (n); 1201, St.L. '21, H type (n); 1423, H-3 type (u); 1435, H type (m,q); 1450, H-3 type (n); 1559, K type (n); 2501, L.A. Ry. '28 (x); 2601, St.L. '30, type M (n,p); 9209, L.A. Ry. '13 (l,n,q); 9351, L.A. Ry. '07 (l,n); 9400, L.A. Ry. (n,x), work car; Pac. Elec. 314, St.L. '08 (i,q); 498 (c,q,i); 1001, Jewett '13 (i), once rail-grinder; 1045 (i); 00150, '99, trolley-greaser; 00157, PE (w); San Diego 508, St.L. '36, PCC; San Fran. Muni. 162, Jewett '14; 171, Bethlehem; Visalia Elec. 301, Amer. '07 (t,x).
Hill of Howth 2 Coras Iompair Eireann (Ireland) to be shipped. Plan for two Pac. Elec. 5050 class.
Pescadero—San Fran. Muni. (q,s), Calif. type.
Pomona—NRHS of So. Calif.: Pac. Elec. 1299, Pullman (i), business car; 164 (f).
Sacramento—San Diego Elec. 1043, St.L. '07 (q,u).
San Bernardino—Key Route Ry. Asso.: Key Sys. 182, Bethlehem '37 (planned).
San Diego—Ry Historical Society: San Diego Elec. 54, '92 (s,x); 528, St.L. '36, PCC.
San Francisco—R&LHS: Clay St. Hill Ry. 8, Halladie 1873, (z); Key Sys. 187, Bethlehem '37; 844 and 899, both Wason 1888, ex-N.Y. El; Market St. Ry. 46, 1880 (t,z); 54, 1880 (z), dummy; San Fran. Muni. 1, Holman '12, Calif. type; 19, United Ry. (z); 578, Hammond '97 (s) sand car.
San Jose—Peninsular Railway 61 (i,q).
Summit—Pac. Ry. Society: L.A. Ry. "Descanso," funeral car.
Temple City—Pac. Elec. 00197 (q), shop switcher.

COLORADO

Denver, park—"Cherrelyn," '83 (h,s).
Golden—Colo. RR. Museum & Rocky Mt. RR. Club: Ft. Collins Muni. 22, Amer. '19 (b,s); Denver & Intermountain 25, Weber '10 (i).
Fort Collins—Pioneeer Museum: Ft. C. Muni. 21, Amer. '19 (b,s).
Woodland Park—Ft. C. Muni. 25 (2nd), Amer. '22 (b,q,s).

CONNECTICUT

Branford — Branford Elec. Ry. Asso.: Baltimore Transit 3715, United Ry. & Elec. '13, crane; Capital Transit 884, Brill '12 (a); City Lines of W. Va. 250, Jewett '04 (c,i,m); Connecticut Co. 0222, blade plow (x); 0245, Russell '16 (w); 500, Brill '04, parlor; 614, Brill '01 (o); 775, Jewett '04 (f); 855 (f,u,x); 865, Wason '05 (f); 1199, Stephenson '06, (f); 1339, Osgood-Bradley '10 (f); 1414 and 1425, both Osgood-Bradley '11 (o); 1602, Wason '11 (f); 1911, Brill '19; 2006 (f); 2350, Osgood-Bradley '20 (b,s); 3000, Wason '22 (b).
Also Crandic 116, Cincinnati '30 (i); Five Mile Beach Elec. '34, Jackson & Sharpe '99 (o,s); Montreal & So. Counties 9, Ottawa '11 (i); New York City 7, Brill '15 (s), sweeper; 68, Taunton '98 (s), wedge plow; 69, Taunton '98 (s), blade plow; 197, Pullman '88 (t); 1001, St.L. '36, PCC; 1792, Laclede '99 (f); 4573, Laconia '06 (a); 8111, St.L. '23 (p).
Also Providence 1575 (f,w,x); Pub. Serv. of N.J. 2431, Cincinnati '13 (f); San Paulo (Brazil) 151, Brill '03 (o,s); Third Ave. Ry, '33, Laclede '93 (c,s,f); 59, McGuire-Cummings '14 (s), snow-sweeper; 316, Amer. 1895 (s); 830, Brill '08 (f); 884, Brill '09 (a); Toronto Trans. Comm. 11, TTC '33 (h,o); 1706, Toronto Ry. '13 (a,s); Union St. 302, Jones '07 (r); United Elec. 61, Jones '93 (f,s); 1504, Rhode Is. '04, emergency.
Warehouse Point—NRHS of Conn.: Boston 5645, Brill '24; Brooklyn 83, '95 (s), sand car; Connecticut Co. 25; Conn. '10, service car; 65, Wason '06; 779, Jewett '04; 840, Jones '05 (o); 1326, Bradley '10; 3001, Wason '22.
Also Fairhaven & Westerville 0309 and 663 (o), both Brill '02; Five Mile Beach Elec. Ry. 36, Jackson & Sharpe '99 (o,s); Gardner & Templeton 12, Brill '15, wedge plow; Nassau Elec. 169, St.L. '95 (s); Shelbourne Falls & Colrain 8, Laconia (x); Springfield Term. 8, S.T., center-cab crane; 10, Wason '01 (c); 16, Wason '26.

DISTRICT OF COLUMBIA

Washington—D.C. Transit Co.: Capital Transit 303, '98 (s); 1512, '92 (s,t); 1053, Brill '35.
Washington—Smithsonian Institution: Seattle Elec. 3 '88 (n,o,s,t,z).
Washington—Wash. Elec. Ry. Hist. Society: Capital Transit 766, '15.

ILLINOIS

Champaign—Illini RR. Club: Illinois Term. 233, St.L. '06 (i); 234, Danville '10 (i,t), "Champaign".
Chicago—Chicago Transit Authority: Chicago Rys. 1, '92, El car; 6 (r,s); North Chicago St. 8 (replica) (h,s); 209 (replica) (t,z); West Chicago St. 4 (s).
Chicago—Illinois Elec. Ry. Museum: Chicago, Aurora & Elgin 320 (i); Chicago, No. Shore 966 (i); Chicago Transit 144, Pullman '08; 1024, Pullman '99, El car; 1268, Pullman '00 (q,t); 1797, ACF '07 (q); E-223, McGuire-Cummings '08 (q), sweeper.
Also Cleveland 0800 (b), rail-grinder; Crandic 65, Pullman '31 (i); Illinois Term. 101, Amer. '17 (i); 170, Amer. '21 (b); 277, St.L. '13 (i); 415, St.L. '13 (i); 1702 (1); Milw. Elec. Lt. & Power 1129, Kuhlman '09 (i); 1135, Kuhlman '09 (i), "Mendota"; Milw. & Suburban 972, St.L. '27.
Chicago—Museum of Science & Industry: Chicago City Ry. 10 (replica 1859-'06) (h,s); 532 (replica '82-'06) (o,s,z).

IOWA

Cedarville—NRHS of Iowa: Southern Iowa 9 (s); Waterloo, Cedar Falls & Iowa No. 100, McGuire-Cummings '15 (i).
Waterloo—(planned): WCF&I No. 381, Thomas '30.

KANSAS

Wichita—Crandic 111, Cincinnati '30 (i,q,u).

KENTUCKY

Covington—Cincinnati Elec. Ry. Historical Society: Newport & Covington 64, Brownell '92 (s), parlor "Kentucky"; Milw. & Suburban 846; Louisville Ry. horsecar. Also horse drawn tower car.

MAINE

Kennebunkport—Seashore Elec. Ry.: Aroostook Valley 70 and 71, both Wason '12 (i); 52, Brill '09 (f); Baltimore Transit 5746, Brill '17; 6144, Brill '30 (p); Biddeford & Saco 31, Brill '00 (o); 615, Wason '20 (b,s,x); Blackpool (England) 144, Bl. '25 double deck; Boston & Worchester 149, Bradley '12 (x); Chicago Transit 225, Pullman '07, std.; Claremont 4, Cl. (1).
Also Connecticut Co. 303 (o); 615, Brill '01 (o); 838, Jones '05 (o), 1160, Stephenson '06; 1391, Bradley '10 (o); 1468, Bradley '11 (o); Crandic 118, Cincinnati '30 (i); Dallas Ry. & Term. 434, Amer. '14, Stone & Webster, std.; Dunedin City (New Zealand) 105, Mornington '03 (z); Eastern Mass. S-71, Bay State '15 (l,s); 4387, Laconia '18; Liverpool (England) 293, double-decker; Los Angeles Transit 521, St.L. '06, Calif. type (n).
Also Manchester 60, Laconia '95 (s); "City of Manchester," Briggs '95, parlor; Manchester & Nashua 38, Laconia '07 (i); Mass. No. Eastern 50, Laconia '01 (f).
Also Metropolitan Transit (Boston) 396, St.L. '00; 475, Newburyport '03; 925, Jones '94, parlor; 1059, Barney & Smith '95, rail-grinder; 2016, Boston El '12 (w); 3234, Goldschmidt '13, rail-grinder; 3246, Industrial '16, crane; 3608, Differential '26, motor side dump; 4400, Bradley '27; 4547, Jewett '06 (a); 5060, Brill '07; will get 5734; 5821, Brill '24; 5970, Laconia '27 (o); 6270, Kuhlman '18 (m).
Also Milw. & Suburban 861, St.L. '20; Montreal & So. Counties 504, Ottawa '24 (f); 610, Ottawa '22 (i); 621, Ottawa '30 (i); N.Y. City 3352, Pressed Steel '04, steel subway car; Philadelphia 6618, Brill '11; Portland & Lewiston 40 and 42, both Laconia '15 (x); Templeton 12, Brill '86 (h,o,s); 24, Briggs '01 (s); Twin Cities 1267, Transit Supply '07; Twin Cities Gas & Elec. 8, Wason '17; Union 10, Brill '80 (h,s); 34, Fiegel '73 (r,s); United Elec. 16, Wason '05 (s), plow; Wheeling Traction 39, Cincinnati '24, curve side; Worcester Consolidated 038, Worcester '12 (f); York Utilities 80, Amer. '19 (b,s); 82, Amer. '19 (b,s); 88, Wason '26; 8, '93 (f,t); 100, Laconia '06 (f); 108, Laconia '02, (1).

MASSACHUSETTS

Boston—MTA 5706, owned by 4 fellows in Boston.

MARYLAND

Baltimore—Maryland Historical Society: Baltimore Transit 264, Brownell, '00 (a); 1164, Brill '02 (o); 3390, Brownell '94 (o); 3612, Brill '94; 3651, Brownell '97; 3828, Brill '02; 4662, Brill '04; 4732; Brownell '80 (h,z).
Elkton (u)—Scranton Transit 1 (s,u); Wilkes-Barre & Suburban 1, replica built 1928 (u).

MICHIGAN

Dearborn—Ford Museum: Cleveland 0140, Brill '90 (s); Ft. Collins Muni. 26, Amer. '23 (b,s); Detroit 24 (h,s); 3865 (p).

MISSOURI

St. Louis—Museum of Transport: Chicago, Lake St. Elevated Forney-type loco; Illinois Terminal 104, Amer. '24; 241, ACF '08 (i); 1595, ITC '28, Class C (f); Indianapolis Ry. (u); Kansas City Pub. Ser. 1533, Amer. '21 (b); New York City 1365, Jewett '05, El car; Purdue Univ. test car "Louisiana," Brill '03; St.L. Public Service 3(h,s); 33 (h,s);

215, Bellfontaine '91 (s), rail-grinder; 426, St.L. '21; 615, St.L. '03; 742, St.L. (p); 850, Amer. '02 (i); 855, Laclede '95, panel sides; 894, Amer. '95; 1001, St.L. '07 (q); 1031, United '07 (q); 1065, United '10; 2009, St.L. '02; 2250, St.L. '03; 3009. St. Louis Waterworks 10, St.L. '02; 11, St.L. '02; 12, St.L. '02 (q); 17, Amer. '10.

NEBRASKA

Minden—Pioneer Village: Ft. Collins Muni. 20, Amer. '19 (b,s); Omaha Ry. 1, '67 (h,s); San Francisco 47 (z).

NEVADA

Reno—Nevada Heritage Foundation—Key Sys. 175.

NEW HAMPSHIRE

North Woodstock—Met. Tr. Au. (Boston) 5777.

NEW JERSEY

Tansboro—Delaware Valley Short Line Trolley Museum: Conestoga Transport (Lancester, Pa.) 236, Amer. '21 (b,s); Philadelphia Transit 5205 (q,u); 5327, Brill '23; 8042; 8534 (q).

NEW YORK

Blue Mountain Lake—Adirondack Museum: Brooklyn horsecar.
New York City—Museum of City of N.Y.: Eighth Ave. 76, Stephenson '55 (h,s).
New York City—New York Trolley Museum: Atlantic City 250, Brill '17 (p); New York City 1000, Clark Equip. '37, PCC; 8361, Brill '25 (p); Queensboro Bridge 601, Osgood-Bradley '30.
Sandy Creek—Rail City Museum: Lake Erie & N. 797 (i); Rochester 3, '75 (h,s); 60, '16, subway car; 0243, sand car; Scranton 5 (s); 107, steeple-cab sweeper; 505, Osgood-Bradley, sweeper; Syracuse 3016, snow sweeper; Utica 66 (u); 2070, '06.

NORTH CAROLINA

Gastonia park—Piedmont & Northern 2, "Old Ironsides." (Is it still there?)

OHIO

Arlington—Cleveland Ry. 4144, Kuhlman '28.
Dayton—ERA of S. Ohio: Cincinnati 2227 (u).
Worthington—Ohio Ry. Museum: Columbus & Ohio 067, Columbus Ry. '20, center cab (f); Columbus & S. Ohio 2 (f); Crandic 119, Cincinnati '30 (i); Detroit 3876, St.L. '29 (p); Kansas City Pub. Serv. 068, '90; 1545, Amer. '20 (b); Ohio Pub. Serv. 64, Kuhlman '24 (i); 21, Niles '06 (i).

OREGON

Glenwood—Glenwood Elec. Ry., Oregon Elec. Ry. Hist. Soc. (Portland): Brisbane Transit (Australia) 136, Brisbane '14 at Brisbane; Key Sys. 169, Bethlehem '38, at San Francisco; 184, Bethlehem '37; Portland Elec. Power 611, Amer. '11, at Glenwood; Sydney Govt. Transp. (Australia) 1187, Meadowbank Mfg. '12, at Sydney.
Hillsboro—Portland Traction 4022, St.L. '24 (q).
North Plains—Marelco Rancho: Portland St. Ry. 3, '72 (h,s); San Francisco 45 (z).
Portland—at Council Crest: Portland Traction 506, Brill '04; at Glen Oaks: Portland Trac. 1455, snow-sweeper; 4012, Brill '31.
Portland—Willamette Valley Elec. Ry. Asso.: British Columbia Elec. 1304, St.L. (i), former pvt. car of Duke of Connaught; Los Angeles Transit 1318, St.L. '23 (m,n); Portland Elec. Power 715, Amer. '12 (f); 1191, Kuhlman '08 (r); Portland Traction 503, Brill '04.
Near Portland—W. W. McCready: Portland Traction 4003, Kuhlman '28 (q); 4010, Brill '30 (q); San Francisco cable-car (q).

PENNSYLVANIA

Arden (near Washington)—Pittsburgh Elec. Ry. Club: Philadelphia Transit 5326, Brill '23; Pittsburg Ry. M1; Pullman '94 (s); 3487, St.L. '05; 3756, Std. Steel '25; 4389, St.L. '16; West Penn Ry. 832, Cincinnati '30.
Reading—Historical Museum of Berks County: Reading City Passenger Ry. 75, RCP Ry. '90, (h,s).

TEXAS

San Antonio—Witte Memorial Museum: Edison Elec. Line 1886, Brill '75 (h,s); San Antonio Pub. Serv. 300, Amer. '12.

UTAH

Salt Lake City—Museum: Bamberger 403, Jewett '10

WASHINGTON

Seattle—Northwest Trolley: British Columbia Elec. 1220, St.L. '13 (i,q); 1235, St.L. '13 (i,q); Portland Traction 4009, Brill '30 (q).
Seattle—Puget Sound Ry. Historical Asso.: BC Elec. 1207, St.L. '13; Portland Traction 1058, Niles (l); 4008, Brill '30 (q).
Seattle—Historical Society: Seattle Elec. 13, '88 (n,o,z).

WISCONSIN

Milwaukee—Oak Creek RR. Museum: Milwaukee & Suburban 960, 968, St.L. '27.
Wauwatosa—Milwaukee & Suburban 978 (q,u).

Canada

BRITISH COLUMBIA

Burnaby—Brit. Col. Elec. 1223, St.L. '13 (i).
Vancouver—Brit. Col. Elec. 53 (s); 1311 (i).

ONTARIO

Toronto—Ontario Elec. Ry. Historical Asso.: Toronto Rys. 55, Preston, snow-scraper; 1326, Toronto Ry. '17 (y); Mont. & S. Counties 107, Ottawa '13 (c,i).

QUEBEC

Montreal—Canadian RR. Historical Asso.: Montreal Trans. Comm. 1-4 M. St. Ry. '05-'24 obs. cars; 7 '61 horse-drawn stage; 8 Patterson & Corbin '95 (s,o.); 20 '61 horse-drawn stage on sleds; 200 Brill '19 (b); 274 Newburyport '94; 350 Brownell '92 (Montreal's first elec tram.); 859 Ottawa '08; 997 Ottawa '10; 1046, '02 (i); 1317 Ottawa '12; 1339 Ottawa '13; (Several other cars, including 2 old ones, now undergoing repairs in shops, may be added to the group to be preserved); Montreal & So. Counties 104, Ottawa '13 (i); 611, Ottawa '14 (i). Brit. Col. Elec. (u).

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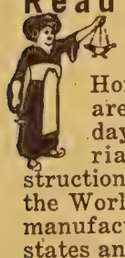

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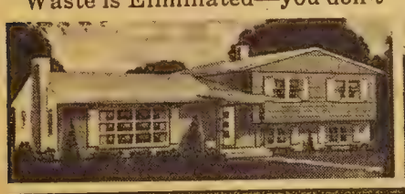

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Hobby Club

by SY REICH

THE READING is so pleased at the phenomenal success of its Iron Horse Rambles last fall that it may schedule additional steam-powered excursions this spring and next autumn. We hope so—not only in 1960 but in many future years also.

Sy Reich

Eastern fans were thrilled when the company resurrected one of its gallant 4-8-4's, No. 2124, Class T-1, sent her through the Reading, Pa., shops (where she was built in 1947), and ran her in a series of railroad-sponsored fantrips. First was an excursion to Shamokin out of Philadelphia with 975 passengers. Then a round trip between Harrisburg, Bridgeport, and Allentown, 810 riders. The third was out of Jenkintown to Allentown and Reading, over 900. Total cash customers for the three steam excursions, nearly 2700.

On one trip Steve Maguire and your *Hobby Club* editor counted 15 coaches, all crowded, plus many more fans.

Fourteen T-1's are stored at Jersey City. Last December the 2124 puffed into CNJ terminal there with a trainload of film players to shoot scenes for a new movie, *From the Terrace*.

Reading officials admit sheepishly that the Iron Horse Rambles have been among their very few profitable passenger runs in years. We understand they made $6,000 on one excursion.

Fans wishing to pledge support or get information may write to Harry E. Hammer, Director of Public Relations, Reading Co., Reading Terminal, Philadelphia 7, Pa. Those living in other sections of the country, who are unable to visit Pennsylvania for such trips, should contact passenger officials and public relations men on other roads with stand-by steam power, pointing out what the Reading did and urging the other roads to do likewise. ●

Reading revives steam power: 2124.
Steve Maguire, 1411 River Rd., Belmar, N. J.

Steam Power

DISAPPOINTING news comes from Norfolk & Western, once America's last stronghold of steam: "No more steam passenger trains. Our last steam passenger loco, No. 611, Class J, is scheduled for immediate retirement." As we go to press, N&W still owns 30 Class Y6 engines and 10 S1 switchers at Williamson, W. Va., and 20 Y6's at Iager, W. Va.

Correcting a recent statement, Charles Foss reminds us that the Black Hills Central is not the only common carrier to operate regularly-scheduled steam passenger trains. As we go to press, Grand Trunk Western is still operating steam on trains 54 and 19 between Detroit and Durand. Steam is also run on freights out of those points.

Strange that steam should survive in General Motors' home town! (Cleland Wylie reports that early this year GTW will take delivery of $3.5 million EMD diesels, including nine 1200-hp. road switchers and eleven GP18's.)

Nickel Plate, a recent operator of steam, has 10 Berkshires, a Hudson, and a Mike stored in New Haven, Ind., according to Jim McKay (age 15), 8225 Chester Blvd., Ft. Wayne, Ind. Jim wants fans to write to him about steam in his state.

The Elgin, Joliet & Eastern will preserve one of its old Class 700 steam engines, placing her on display near the Operations Bldg. at Joliet, Ill.

Tom Lawson, Jr., tells us about the following steam in Georgia:

Augusta: Merry Bros. Brick & Tile—six 3-foot-gage 0-4-0T's; Va.-Carolina Chemical—one 0-6-0T; Ga. Iron Works—one 0-4-0T; Atlantic Steel Co.—one 0-4-0T
Savannah: Savannah & Atlanta—one 4-6-2
Rome: Georgia Power—one 0-6-0
Whisburg: Georgia Power—one 0-6-0T
Albany: Georgia Power—one 0-4-0T
Macon: Georgia Power—two 0-6-0T's; Cherokee Brick—saddletanks

In Tallasse, Ala., the Birmingham & Southeastern has one Consolidation.

An ex-M&StL 2-8-0 now adorns East Park in Mason City, Iowa.

Illinois Central's No. 1678 (2-8-2) is at Waterworks Park, Des Moines, awaiting a buyer or removal for scrap. Used for steam heat three years ago, she has been idle ever since.

Lou Keller of Cedar Rapids, Iowa, who bought No. 70 from the Illinois Central, believes he is the only man in America owning a steam locomotive that is still on connecting rail to main-line tracks. She is an Alco (Cooke Works) 2-8-0, built in 1903, operated for 55 years, and still in good condition. Lou hopes to be able to use her on an 84-mile round trip for railfans to Manchester, Iowa.

Efforts to save SP No. 1765 for their museum at Perris, Calif., are still being made by Pacific RR. Society, Inc., Mount Ribidoux Chapter, 180 J St., San Bernardino, Calif. "We have leased a mile of right-of-way from the Santa Fe on which to operate this engine," writes W. B. Garner, recording secretary. "This is a big undertaking and we need help. Passes are issued for all donations. Illustrated brochure will be sent free to anyone on request."

Setouts and Pickups

WITH abandonment of the New Haven's Old Colony passenger lines, the company has collected from 27 passenger stations their old lamps, signs, pot-bellied stoves, waiting-room benches, clocks, and scores of other items of interest to railfans. These items may be purchased. For a catalog and price list contact George E. Dowling, District Storekeeper, New Haven RR., Boston, Mass.

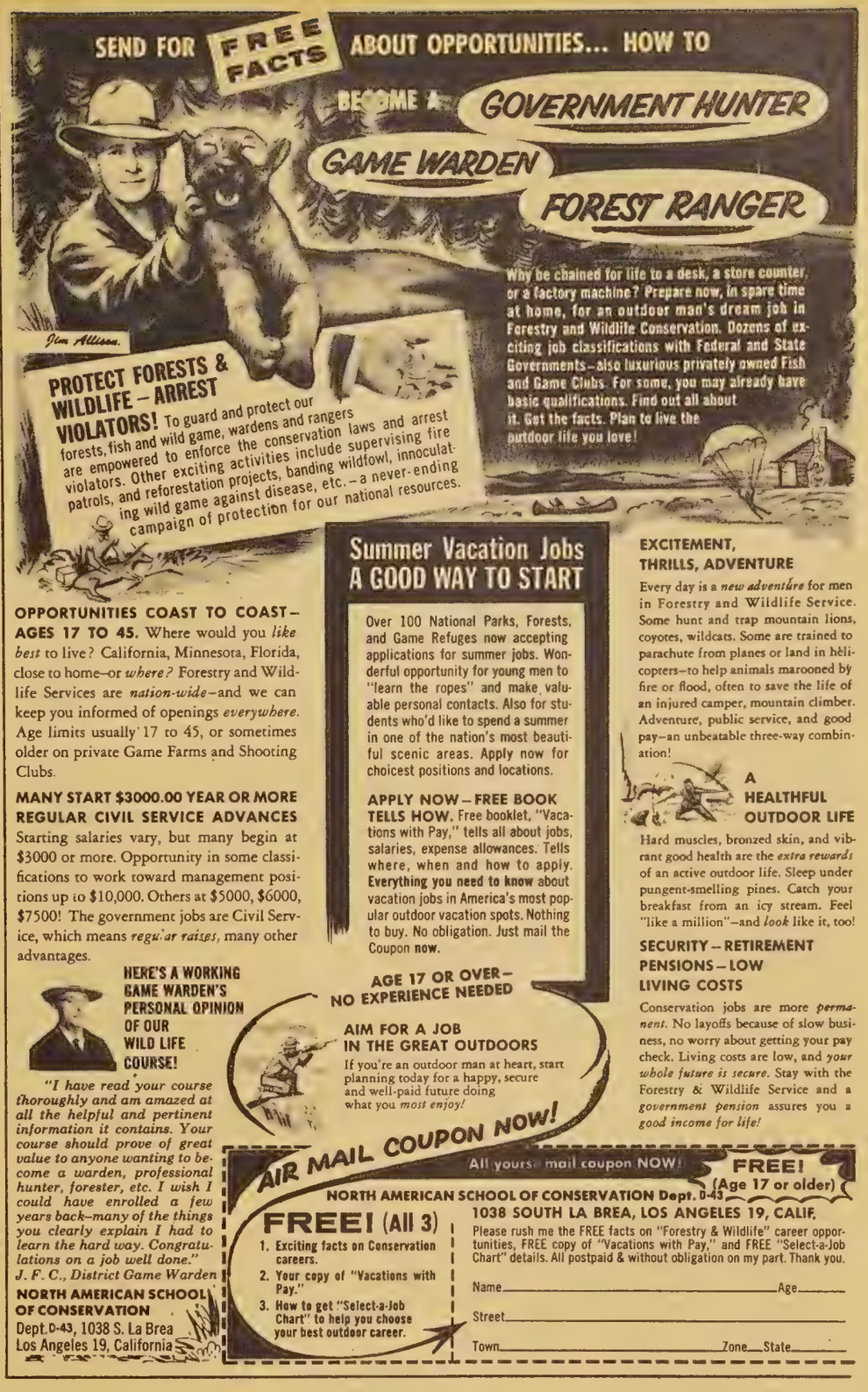
Several thousand historic old postcards, 3 different cards, all in color, are being offered for sale by Railway Historical Society of San Diego, Inc., P.O. Box 9351, San Diego 9, Calif. The set costs 20¢ postpaid. Two are scenes on the San Diego & Arizona Eastern; the other is a picture of streetcars on Broadway in San Diego. Funds from this sale will be used to improve the Society's paper, *Dispatcher* (subscription price, $1 a year).

The same Society has a 16mm silent film in black and white taken in Carriso Gorge and San Diego in the early 1920's, showing steam locos and streetcars in action. Running time, about 10 minutes. Rental fee for one showing, $2.50 plus postage. This Society will sponsor a one-day trip March 20 from San Diego across the border to ride the Senora Boja Calif. Railroad.

"The Belfast & Moosehead Lake is the only shortline operating an RPO car," writes W. I. Hall, the road's general auditor, Belfast, Maine, "but we are discontinuing it February 5. Any reader who mails a self-addressed stamped envelope plus 10¢ handling charge will be sent a last-day cover of this RPO run—*if* his request reaches me in time."

A new fan group, Sacramento Valley RR Asso., has been formed to set up a museum of railroadiana. It is negotiating to get a Southern Pacific cab-ahead, a Daylight 4-8-4, other locos, a turntable, cars, water tank, and so on. The group needs more members, more cash. Contact Gunnar Henriouelle, 2911 E St., Sacramento 16, Calif.

Puget Sound Railroader for Sept. '59 featured excellent articles on Great Northern's 2 electrications and Skagit River Ry. The editor, Leslie Blanchard, says very few copies of that issue are left. Address: P.O. Box 1362, Broadway Station, Seattle, Wash.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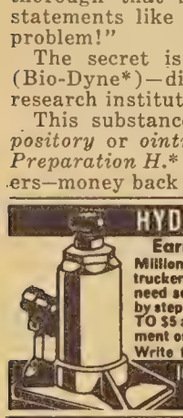

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The Puget Sound RR. Historical Asso. now has a steam locomotive. It raised half the purchase price of NP 1070. The rest, $2,500, came from Northwest Glass Co. but the fan group has promised to buy the company's share within a year. Meanwhile, the loco and an ancient ex-NP passenger car are stored in South Seattle.

Last September the UP received Great Northern B-D+D-B electric loco at its Omaha shops to be converted to a coal-gas-turbine electric on a trial basis.

Dick Haave, Rte. 2, Paw Paw, Mich., says Illinois Midland has just bought CB&Q gas-electric 9120 and will scrap No. 4 (0-4-OT).

Week-end of Feb. 19-22—tri-state tour of Calif.-Nevada RR. Historical Society and Pacific Coast Chapter of R&LHS. Leave San Francisco via WP to Salt Lake City, UP to Barstow, return via Santa Fe. Info. from Arthur Lloyd, 974 Pleasant Hill Rd., Redwood City, Calif.

March 26-27—Kansas City Chapter of NRHS sponsors trip to St. Louis, leaving via Missouri Pacific, returning via Wabash. Visit Museum of Transportation, tour streetcar lines. Info from H. H. Hoover, 1638 Poplar St., Kansas City, Mo.

A free copy of new, illustrated, 44-page booklet, *Facts and Figures About British Railways*, may be obtained by writing to J. H. Brenner, Public Relations Adviser, British Transport Commission, 222 Marylebone Rd., London, N.W. 1, England.

The Frisco (roster, page 59) is one of the very few roads to own named diesels. Its 2000 series passenger-haulers are named for these famous racehorses: Ranger, Comanche, Dan Patch, Winchester, Traveller, Whirlaway, Jet Pilot, Count Fleet, Gallant Fox, Flying Ebony, Sea Biscuit, Truxton, Twenty Grand, Citation, Pensive, Pander, Cavalcade, Gallahadian, and Champion—Nos. 2001 through 2022 respectively, but skipping 2003 and 2008, whose names we don't know.

This note comes from W. T. Golson, P.O. Box 1791, Baton Rouge, La.: "My hobbies are photography and old streetcars. To share them with other fans, I offer to photograph New Orleans streetcars for any reader if he will send me two rolls of film, still or movies as he prefers. No money. I will expose one roll and mail it back prepaid for the owner to develop. I have a Bolex Supreme 16mm camera for 100-foot roll movie films, a Rolliflex for size 120 roll films, and a Crown Graphic for 4x5 cut films or film packet."

We are not acquainted with Mr. Golson personally, but the photo samples he sent us are of high quality.

For free copy of booklet, *Steam Locomotives on Display in U.S.*, 18 big pages, write to Association of American Railroads, Public Relations, Transportation Bldg., Washington 6, D. C.

"After *Railroad* had published two pix of mine," writes Paul Stringham, Box 734, Peoria, Ill., "I got 35 letters of inquiry. Only four of them enclosed self-addressed stamped envelopes; one sent a 4c stamp. I answered five but not the others."

Coming soon on a *Railroad* cover is a painting of Great Northern engine 3388 (Bald., 1910) by Pat McMahon. Who can give information on her, especially anecdotes, to run in the same issue?

Steam in Canada

CANADIAN NATIONAL no longer runs steam in Montreal area but has steamers of various wheel arrangements stored. The Canadian Pacific is using some 4-6-2's and 4-6-4's on passenger trains, 2-82's on freights and transfer runs. You'll find a few active steam switchers and freight and passenger engines at Hamilton.

"CPR steam is nearly gone from Winnipeg," laments Carl Gay, 400 Linden Ave., Winnipeg, Canada. "Seven units are still being steamed up in Weston roundhouse: 926, 972 and 989 (all 4-6-0's); 1243, 1296 and 2343 (all 4-6-2's), and 5216 (2-8-2). CNR trains 33-34 are still using 4-82's such as Nos. 6061, 6067 and 6072."

The 17,000-mile Canadian Pacific has just received its 1000th diesel, No. 8,023, a 1000-hp. road switcher from Montreal Loco. Works. Diesels now perform 92% of all CPR rail transportation.

CPR steamer 5934 is mounted on a pedestal in a Calgary park. Glittering in fresh black and gray paint, with brass fixtures shining and driving wheels white-rimmed, she looks more like a smart newcomer than a veteran. The proud 350-ton giant had been climbing stiff grades in the Rockies, but on her last trip a diesel goat pushed her 10 miles from Ogden shops to the park.

Gone is CPR mixed train No. 643. Ten-wheeler No. 425, on her way to be scrapped, pulled the desolate two-car train over the old 79.8-mile Pontiac & Pacific line on its final run last fall, thus ending 70 years of passenger service and steam operation.

EMD's New Models

IN RECENT years while the Chevrolet, Pontiac, Oldsmobile, Buick, and Cadillac divisions of General Motors ballyhooed the increase in horsepower of their latest models, the Electro Motive Division held firm with conservatively-rated diesels. Between 1946 and '54 the hp. of the basic 16-cylinder was held at 1500, and in 1954 it was modestly raised to 1750. Now EMD is introducing a revised line of road switchers with higher horsepower, and with supercharged engines. They include:

Model RS1325, a normally aspirated 1325-hp road switcher with B-B wheel arrangement, for branch-line and terminal work. Basically a souped-up version of the former SW1200, with a small hood aft for a steam generator.

Model GP18, a normally aspirated 1800-hp. B-B road switcher. Designed for normal road work, successor to the GP9.

Model SD18 is a normally aspirated 1800-hp. unit, C-C wheel arrangement, high initial tractive effort.

Model GP20, a turbo-charged 2000-hp. B-B unit using the same engine as the GP18 except with turbo-charging, especially applicable where higher hp. is required.

Model SD24 (announced Dec. 15, 1958), an unprecedented C-C, obviously mean to compete with the FM H24-66 Trainmasters and with the Alco Products' DL-600 line. Its turbo-charging maintains full hp. rating at high altitudes.

Why higher horsepower? Initially, this move puts EMD in a competitive position against the Alco Products and FM high-hp. units which are gaining prestige. Railroads have been running longer trains since the post-war modernization with CTC, train-radio, and diesels. As trains lengthen, more hp. is needed. By raising the per-unit hp. gradually, the roads need own fewer units while retaining the flexibility of MU operation.

But increased hp. is not EMD's major announcement. The 1960 models have many features designed to cut costs of maintenance and per-hp. fuel. New features include electro-magnetic control equipment replacing electro-pneumatic control, improved traction motor and generator, 26L brake equipment, new piston-and-ring combination, new camshaft profile, and new needle valve injectors. •

Rock Island Roster

CORRECTING our CRI&P roster (Dec. '59), Bill Reibe and Craig E. Burroughs point out:

Engines 2 and 3 are really LWT-12's, acquired from EMD last year. Unit 41 was scrapped, and 978 was rebuilt to GP9 1322. Nos. 367-371 are Whitcomb model 44-DE-5. Nos. 425-429 were built in 1948-'49. Nos. 430-441 are model GP7, not F7A. Series 457-456 should read 457-469.

Of series 500-528 fourteen units were rebuilt to model SW900 between May '57 and Oct. '58 and renumbered 550-563. The remaining 15 units are being rebuilt to SW900 model 1000-hp. switchers and renumbered 900-914. Units 598-599 are model S1. No. 624 was a PA-1 built by Alco and scrapped. 716-729 are model S2. No. 730 is a high-hooded Alco, while 735-745 are S2's.

No. 627 was rebuilt to E8A 656 in 1953, and 632B was scrapped. 643 was EMD 952. Series 700-706 should be 700-707. Nos. 731 and 732 are Alco GE 1000-hp. units bought from Toledo Terminal RR last year. 746-749 were Alco-GE model RS-1's purchased in 1941 and sold to U.S. Army in 1942 for service in Turkey. 1000-1016 are Whitcomb model 75-DE-12.

1016 was sold to the DM&CI, and 1006 was sold to Great Southwest RR., anew Texas switching line. 1301 was scrapped. 1323-1332 are GM-EMD model GP9, delivered April '59. Nos. 1333-1342 are model GP18, delivered November '59. Nos. 345-350 had a C wheel arrangement. 750-751 are model AB. Although the Rock Island's records list units 500-528 as model SC and units 700-706 as model NC, the GM-EMD records list them as SW and NW-1 respectively. •

Overseas Wheel Arrangements

THE FOLLOWING letter comes from Jerzy Kucharczyk, Kosynierow Gdynskich 8a/4, Wroclaw 9, Poland:

"Having read Sy Reich's article on "Wheel Arrangements' (Oct. '59), I will tell you how the Polish State Rys. classify locomotives. Each loco is marked with a series sign and the inventory number. Steam locos carry P for passenger express, O for passenger, T for freight, K for tank engine.

"A small letter indicates wheel arrangement: a is Whyte 2-2-2; b is 0-4-0, c is 2-4-0, d is 4-4-0, e is 2-4-2, f is 4-4-2, g is 4-4-4, h is 0-6-0, i is 2-6-0, k is 4-6-0, l is 2-6-2, m is 4-6-2, n is 2-6-4, o is 4-6-4, p is 0-8-0, r is 2-8-0, s is 4-8-0, t is 2-8-2, u is 4-8-2, w is 0-10-0, y is 2-1-0, and z is 2-10-2.

"For electrics, E is followed by P, O, or T, or by M for yard switcher or U for general purpose. S means a diesel or gasoline locomotive.

"As examples, Pt 47 is a heavy Mike, OK 1 is a passenger Ten-wheeler, Ty 246 is a Decapod freight-hauler. OKz 32 is a tank passenger 2-10-2 loco, EP 01 is a passenger electric, and SM 30 is a diesel-electric yard switcher."

In addition to T for tank locomotive and C, Camelback; the British Railways use other suffixes. ST means saddle tank; PT, Pornier tank.

The Polish classifications is somewhat like the Pennsylvania Railroad's system. The Pennsy designated letters for each wheel arrangement: A for 0-4-0, B for 0-6-0, C for 0-8-0, D for 2-4-0's, E for 4-4-2, F for 2-6-0, G for 4-6-0, H for 2-8-0, I for 2-10-0, J for 2-10-4, K for 4-6-2, L for 2-8-2, M for 4-8-2, N for 2-10-2, O for 4-4-4, P for 4-6-4, Q for 4-6-4-4 or 4-4-6-4, R for 4-8-4, S for 6-8-6 and T for 4-4-4-4.

The first engine designed of a given wheel arrangement was 1, the second 2, etc. Suffixes such as a, b, etc., denote sub-class, and s for superheating. Thus, the first Pacific was a K-1. The fourth was a K-4. When superheating was added she became a K-4s, and some slight modifications of the throttle, etc., made her a K-4sa.

French National Rys., SNCF, faces the problem more directly. Each different design of a locomotive wheel arrangement has a separate letter. The wheel arrangement, design letter, and inventory number make up the road number. Thus, a Baldwin-built 2-8-2 on the SNCF is 141-P-2082.

The German system is still different. Low-class numbers are reserved for high-speed passenger engines, medium-class for general-purpose engines, and high-class for switchers and tank engines. Thus, Class 01 is fast-passenger Pacific, Class 38, is on local passenger or freight runs, Class 50 is a 2-10-0 designed for heavy freight, and Class 97 is a tank engine for suburban service and switcher duty. Other European roads use rather arbitrary numbering or combinations of the French and German systems. •

Next Issue: June (out April 1)

Illustrated feature: "Great Days of Steam Power on the Old Uintah Narrow-Gage."

"Ohio Shortlines," by Sy Reich.

"Diesels, Too, Have Spark Arresters." by C. K. Walker.

Other lively features, an Eddie Sand fiction story by Harry Bedwell, departments, many good photos, and a steam-engine cover picture in beautiful color.

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Scene at Clear Creek, Indiana, in the days when the Monon boasted steam power.
Both photos by J. F. Bennett, 1112 N. College St., Bloomington, Ind.

The Monon Railroad

Roster compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Eff.	Weight	Date	Notes
5-6	600	GM-EMD	SW-1	B-B	30,000	198,000	1949	
11-17	1000	GM-EMD	NW-2	B-B	32,000	248,000	1942,'47	
18	1000	FM	ALT 100.6A	B-B	34,600	243,600	1946	
21-29	1500	Alco-GE	RS-2	B-B	34,000	239,000	1947	
30-38	1500	GM-EMD	BL-2	B-B	32,500	230,000	1948-'49	
45-46	1500	FM	ALT 200.2A	B-B	42,800	242,000	1947	
51A, 51B 61A-65A, 61B-65B, 81A, 82A, 81B, 82B, 85A, 85B	1500	GM-EMD	F-3A	B-B	32,500	230,000	1946-'47	1,3
83A-84A, 83B-84B	1500	GM-EMD	F-3A	B-B	23,750	232,500	1947	
61C-65C	1500	GM-EMD	F-3B	B-B	32,500	222,910	1946	2,3

Miscellaneous Notes

Roster compiled from data supplied by Monon RR., accurate as of Oct. 31, 1959. The Monon was formerly known as the Chicago, Indianapolis & Louisville. Abbreviations used: GM-EMD, General Motors-Electro Motive Division; FM, Fairbanks Morse; Alco-GE, American Locomotive Co.-General Electric.

(1) 85A-85B ex-GM-EMD 754A1-754A2.

(2) 65C ex-GM-EMD 754B1.

(3) Original 62B, 64A, 64C were damaged beyond repair and scrapped. These were replaced by second 62B, 64A, 64C of the same type. ●

Nos. 551 and 61 in the era when diesel locomotives were appearing on the Monon.

St. Louis—San Francisco Railway

Roster compiled by Sy Reich

Road Numbers	HP	Builder	Builder's Model	Wheel Arngt.	Tract. Eff.	Weight	Date	Notes
1-2	360	Dav.-Bess.	44-ton	B-B	22,000	88,000	1942	
3	360	Whitcomb	44-ton	B-B	22,000	88,000	1943	
4-8	380	GE	44-ton	B-B	22,000	88,000	1943	
11	300	GE	45-ton	B-B	22,500	89,000	1941	1
60-61	660	Baldwin	VO	B-B	49,600	198,000	1942	
101-111	1000	Alco-GE	RS-1	B-B	61,150	244,600	1944-'47	
200-237	1000	Baldwin	VO	B-B	59,700	238,880	1941-'46	2
238-241	1000	BW	DS-4-4-1000	B-B	57,200	228,760	1948	
250-265	1000	GM-EMD	NW-2	B-B	62,000	247,960	1948-'49	
270-281	1000	FM	ALT 100.6A	B-B	60,400	241,500	1948-'49	
282-285	1200	FM	H12-44	B-B	61,700	246,980	1951	
290-294	1000	Alco-GE	S2	B-B	58,100	232,600	1948-'49	
300-304	1200	GM-EMD	SW-7	B-B	62,000	247,940	1950-'51	
305-314	1200	GM-EMD	SW-9	B-B	62,000	247,540	1952	
500-549	1500	GM-EMD	GP-7	B-B	61,800	247,100	1950	
550-554	1500	Alco-GE	RS-2	B-B	60,875	243,500	1949	
555-632	1500	GM-EMD	GP-7	B-B	61,800	247,100	1951-'52	
2000-2005	2000	GM-EMD	E-7A	A1A-A1A	54,200	325,160	1947	
2006-2022	2250	GM-EMD	E-8A	A1A-A1A	55,670	330,400	1950	
5000-5017	1500	GM-EMD	F-3A	B-B	57,200	229,000	1948	3
5018-5039	1500	GM-EMD	F-7A	B-B	58,300	233,400	1949-'50	
5040-5051	1500	GM-EMD	FP-7A	B-B	60,300	255,460	1950-'51	
5100-5117	1500	GM-EMD	F-3B	B-B	57,300	229,180	1948	4
5118-5139	1500	GM-EMD	F-7B	B-B	58,000	231,800	1949-'50	
5140-5144	1750	GM-EMD	F-9B	B-B	59,300	237,400	1954	
5145-5152	1750	GM-EMD	F-9B	B-B	59,600	239,500	1957	
5200-5231	1500	Alco-GE	FA-1	B-B	58,400	233,500	1948-'49	5
5300-5315	1500	Alco-GE	FB-1	B-B	56,100	228,900	1948-'49	6

Miscellaneous Notes

Roster compiled from data supplied by Chief Mechanical Officer, Frisco Road, accurate as of Oct. 6, 1959. Abbreviations used: Dav.-Bess., Davenport-Besseler; GE, General Electric; GM-EMD, General Motors, Electro Motive Division; BW—Baldwin-Westinghouse; Alco-GE, American Locomotive Co.-General Electric; FM, Fairbanks Morse.

(1) One axle on each truck driven by a traction motor, the other axle through a side-rod.

(2) 200-206, 210, 215 repowered by GM-EMD. New specs: HP, 1000; weight, 244,090; TE, 61,000.

(3) All F-3A's converted to F-7A's except 5005, 5007, which were converted to F-9A's; HP, 1750; TE, 60,600; weight, 242,300.

(4) All F-3B's converted to F-7B's.

(5) All FA-1's repowered by EMD except 5210, 5214, 5220-5231. New specs: HP, 1500; TE, 59,300; weight, 237,100.

(6) 5300-5311 repowered by GM-EMD. New specs: HP, 1500; TE, 57,600; weight, 232,080. ■

Maine Central Railroad

Knowing that her father was a railfan and wanting to give him a novel birthday gift, Miss Nancy Miller of 233 Pembroke Ave., Wayne, Pa., persuaded Maine Central president, E. S. Miller (no relative), to let him ride in a diesel locomotive cab from Brunswick to Portland, Maine, and Nancy went along with him. We see her climbing into the cab.

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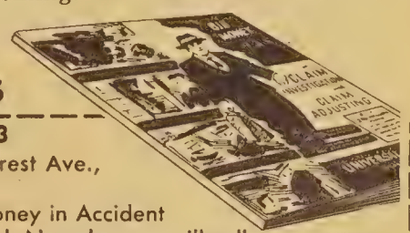

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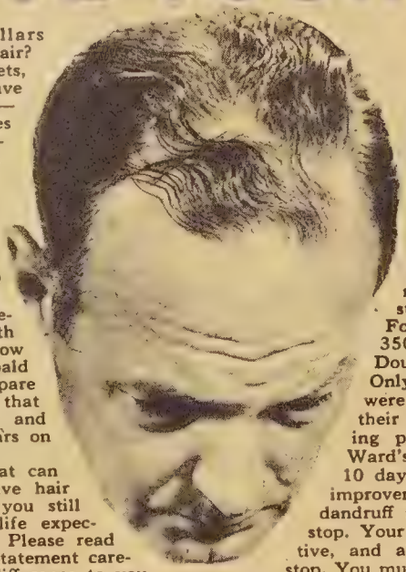

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Each entry we get by mail will appear in the next available issue; but we work far ahead, so don't be disappointed if it is not printed immediately.

Address Sy Reich, Railroad Magazine, 205 East 42nd Street, New York 17, N. Y.

JOHN AARDEMA (ex-Erie train dispr.), 223 Slater St., Paterson, N. J., wants pix Pull. obs. cars Ridgewood, Rutherford; priv. car J. A. Pauldon, Erie locos 2513-2540 as originally built, Erie 469.

DICK ANDERSON, 334 S. Prindle, Arlington Hts., Ill., sells 35mm to p.c. size steam, elec. negs.

KEITH ANDERSON, 116 N. Skeena St., Vancouver, B. C., Canada, sells pix, negs., size 116, esp. CPR, CNR, NP, Canadian shortlines. Wants back issues Railroad Magazine.

DICK AULETTA, 154 Stratford Rd., New Hyde Park, N. Y., wants maps, tts., personal recollections of Parkersburg-Vienna, W. Va., and Marietta-Belpre, O., trolleys.

STAN BAKER, 2525 Pahl Ave. N.E., Minneapolis, Minn., wants pix of steam in Twin Cities: 35mm color slides, black and white, color pix.

R. N. BALL, 28 Burymead, Bladock Rd., Stevenage, Herts, England, trades British Rys. tts., emp. tts. for those of U.S.

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ELMER BERG, Glidden, Iowa, wants info. on C&NW wreck at Clybourn Jct., Ill., long ago.

R. BOGGIANO, 326 Audubon Ave., New York City, sells pix NYC, C&NW, CNJ, SP, Pennsy. (SAS)

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L. J. BROWN, 1019½ W. Woalman, Butte, Mont., wants pen pals, esp. engine crews in Montana.

F. R. BRUNOT, 645 E. 54 St., Hialeah, Fla., sells on approval 3½x5 pix SAL, FEC, WM, B&O, New Haven, NYC, shortline diesels.

STAN BULSIEWICZ, 68 Pinedale Rd., Asheville, N. C., buys steam and elec. pix NYC and central NY state. Wants book "Mixed Train Daily."

LEO CALOIA, 14813 Mansa Dr., La Mirada, Calif., will sell or trade Kukman's "Science of Railways," 9 vols., pub. 1898.

BILL CARRUTHERS, 405 Belsize Dr., Toronto, Canada, swaps U.S., Canadian steam negs., sizes 616, 620. Also sells, trades TTC pix, negs. Wants traders in Quebec and Manitoba provinces.

JOHN CHARLES, 7011 Whitehill St., Dallas, Tex., buys, trades switch keys, emp. tts.

JOHN CORCORAN, RFD 1, Jamestown, N. Y., wants to contact anyone who sells rr. patches.

W. E. CORLEY, 839 S. Pecos St., Denver, Colo., will buy telegraph relay, UP tts. '20-'39.

DAVE CRAWFORD, 35 Colfax Rd., Havertown, Pa., sells size 8x10 pix C&LE 127 at P&W shops 1930, FJ&G 125 at Brill.

TOM CUNNINGHAM, 1705 Sarah St., Pittsburgh, Pa., will buy Kalmbach's "Pa. RR," "Locos of PRR."

FRANK CZARNOCKI, 215 Walden Ave., Buffalo, N. Y., wants pen pals to swap pix, steam, elec., trolleys, ferries, etc. Answers all mail.

DICK DATIN, 5457 Virginia Ave., Los Angeles, Calif., sells color slides SP n.g., Los Ang. Traveltown, Pomona steam loco exhibits.

OWEN DAVIES, 1214 LaSalle St., Chicago, Ill., buys, sells back issues Railroad Magazine, books, other railroadiana. Big list free.

C. J. DISMUKES, Dahlonega, Ga., sells dramatic 8x10 pix Gainesville Midland last steam runs in Ga., black-white prints, color transparencies. (SAS)

G. R. DRIGGERS, RFD 1, Box 114, Wagram, N. C., selling entire collection: 18,000 size 116-616 steam photos, with files, $1800; compl. file Railroad Magazine, all issues, Oct. '06 thru April '59, and Trains, Nov. '40 thru Nov. '58, $1,000. Will not break sets.

BOB EMERICK, Box 522, Villanova, Pa., will sell rr. signal equip., including CTC. Buys switch keys. Wants to hear from collectors of switch keys.

CHUCK FEATHER, 442 Salvini Dr., Pittsburgh, Pa., will trade B&O steam loco capitol dome emblem for PRR keystone, UP shield, NYC oval, and other railroadiana. What have you?

JOE FELIX, 208 Pleasant St., Roseville, Calif., sells trolley tokens, transfers, emp. tts. (SAS)

BOB FIELD, 107 Stanyan St., San Francisco, Calif., sells size 8x10 steam, elec. action pix. (SAS)

H. J. FLYNN, 9515 Avers Ave., Evergreen Pk., Ill., wants pix, negs. steam, diesel, elec. esp. SRN.

PAUL GARDE, Box 279, Green Mountain Falls, Colo., has new listings of slides steam, New England trolleys. List, sample 25c.

CARL GAY, 460 Linden Ave., Winnipeg, Canada, sells CNR, CPR steam and diesel pix; wants pc. size pix and negs. of same.

TED GAY, 6 Northview Dr., Morris Plains, N. J., sells pc. size steam pix, some negs., many rrs. Prints 15 for $1 (any may be returned). No list; state rrs. or types wanted.

L. H. GEDGE, 3007 Carlton Rd., Shaker Heights, O., buys, sells, trades elec. lines slides. Buys CERA Bulletins.

NORMAN GIDNEY, 2621 E. 29 Ave., Vancouver, B. C., Canada, sells back issues Railroad Magazine. List for 5c coin.

WM. GORDON, 811 Garson Ave., Rochester, N. Y., will sell 175 old trolley transfers. (SAS)

WALT GRANDE, 4243 SW Admiral St., Portland, Ore., buys sizes 616, p.c., 5x7 pix, negs. Ore., Wash. steam locos, rr. scenes.

ADOLF GUTOHRLEIN III, 5821 Gardenia Ave., Long Beach, Calif., will sell, trade '46 Car Bldrs. Cyclo., '43 SP rulebook.

D. C. HALLETT, 60 Eric Rd., Romford, England, will sell interesting 50-yr. collection of loco data, pix, plates, etc. (SAS)

R. E. HANN, Brown Hill Dr., Mitcham, South Australia, sells, trades tts., pix S. Aust. Rys., size 620. (SAS)

Z. HANSEN, 1626 Sherwin Ave., Chicago, Ill., will buy '46-'60 NYC loco class book, NYC pass. car plan book since '50.

GRAHAME HARDY, Carson City, Nev., buys, sells old issues Railroad Magazine, other mags., books, wide variety railroadiana. Big list free.

RAY HIGGINS, 419½ Millinocket, Maine, sells BAR size 127 steam, diesel negs.

HARVEY HUSTON, 860 Mt. Pleasant St., Winnetka, Ill., wants pix, negs. Robbins RR., Thunder Lake Lbr.

R. W. JENNINGS, 13 Cliff Ave., Scituate, Mass., sells size 616 pix, steam, traction. No list.

LARRY JOHNSON, 545 Wayne Ave., Chambersburg, Pa., will sell PRR calendars complete '32-'57. (SAS)

ARNOLD JOSEPH, 2512 Tratman Ave., New York, N. Y., sells back issues Railroad Magazine, Trains, model mags., other rr. mags. (SAS)

RICK JOWERS, 3967 Arden Way NE, Atlanta, Ga., trades shortline, industrial negs., some Class I steam.

ARTHUR KAFAR, 400 Bel Air, Glenview, Ill., will sell back issues Railroad Magazine, Off. Guide, '23 Book of Knowledge. (SAS)

SHELDEN KING, R.D. 3 (Magee), Waterloo, N. Y., will sell "Trolley Pictures of the Finger Lakes Region," 24 pages, 39 pix, map.

DON KISSICK, 36 Thompson St., Princeton, Ill., wants color, black and white negs. CA&E, pix, negs. elec. line Pt. Washington, Wis. to Milwaukee.

CHAS. KRING, 117 Penn Ave., Collingswood, N. J., wants pix, info. on Norristown or Schuylkill Vall. Trac. trolleys sold to Omaha about '30.

CARL LARSON, 24 Forest Ave., Caldwell, N. J., will sell 1879 PRR by Dredge (contains 82 detailed plans), $100; 1888 Car Bldrs. Dictionary, $100.

FRANK LESLIE, 123 Lake Ave., Red Bank, N. J., wants builder's plates PRR, N&W, CPR, CNR, etc.

WM. LINLEY, 431 Brittany Dr., Ottawa, Canada, sells various size loco pix, tts., emp. tts., tr. orders, clearances. (SAS)

R. R. LOCKE, 8937 49 Ave., Oak Lawn, Ill., wants pix, tts. GTW suburban trs. serving Chicago about 1900 operating to cemetaries.

DON LOCKETT, 838 Plymouth Ave., Mt. Royal, Que., Canada, sells pix, black and white and color CPR, CNR. List 10c.

KENT LOUDON, 144 Barbour St., Buckhannon, W. Va., sells color, black and white pix, steam, diesel on Eastern rrs. List 10c.

G. W. LOWE, Bellevue, Ia., will sell Railroad Magazine '40-'47, '50-'52, others, good cond.

A. H. MacGREGOR, 336 Hawthorne Ave., Webster Groves, Mo., wants pix LS&MS 2-6-2 4700's.

FRED MALONEY, 6 Harriet St., Brighton, Mass., will trade 8x10 pix MTA PCC or type 5 for same of Dallas PCC when new.

JOHN MARSHALL, 901 Hammel St., Akron, O., sells size 120 trolley pix, 20c ea., 6 for $1: Pittsburgh, Johnstown, Washington (D.C.), Baltimore, Cleveland, Shaker Hts., Toronto.

PAUL MAXIMUKE, 19593 Cranberry Blvd., Cleveland, O., buys pix Lakeside & Marblehead, CUT elec., NYC Linnwood and Collinwood roundhouses prior to '50.

WM. McDERMOTT, 1173 Bridge Rd., Oakville, Ont., Canada, will buy CPR swinging bell and loco number plate.

R. McGAUGHEY, 5 Hardy St., Framingham, Mass., sells '58 annual reports BAR, SAL, P&WV, Frisco, PRR, NYC; also WP&Y emp. tt.

GLEN MacGREGOR, 165 E. 27 Ave., Vancouver, B. C., Canada, buys, sells, trades sizes 116, 120 negs., pix, steam, diesel, elec., all Canadian rrs. List, sample 25c.

GEO. MERCHANT, Box 134, Brighton Sta.,

NOW! BUY WAR SURPLUS DIRECT FROM U.S. GOVT

Airforce, Navy, Army Equipment often goes . . . for pennies on the dollar

PRICES PAID AT RECENT SURPLUS SALES

Jeeps	$277		
Autos	$78	Planes	$366
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BUY DIRECT from the U. S. Government at TREMENDOUS SAVINGS. Eliminate the middlemen — SAVE BIG MONEY! Pay as LOW as 2¢ on the dollar or less. Our Directory Government Surplus Sales lists 100's Army, Navy, Air Force Government Surplus Depots. Many of them right in your own back yard. BUY JEEPS, sports equipment, hunting, fishing and photographic equipment and supplies, radio, electronic and electrical equipment, trucks, boats, airplanes. Plumbing, hardware, office equipment and supplies. Tools, machinery, furniture. We DO NOT sell jeeps or other surplus. This **1960** book tells how to buy Government Surplus direct. No dealer profits to pay. Send $1 TODAY for "Government Surplus Directory."

MAIL COUPON NOW!

Aviation Surplus Center, Dept. AM-1
Box 789, York, Pa.

Gentlemen:
Please rush me your 1960 "Govt Surplus Directory." Enclosed is $1.00 in full payment. (We accept cash, checks, stamps or money orders.)

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CASH IN ON WAR SURPLUS!

IMAGINE! HUNDRED DOLLAR VALUES —NOW SELLING FOR PENNIES!!

Hundreds of surplus items for home, farm, garage and shop . . . going for pennies on the dollar! All built to the government's highest standards. Tools, machinery, gear reducers, pumps, boats, motors; page after page of tremendous bargains.

SEE FOR YOURSELF: Send for this big catalog and see for yourself! See pages of surprising bargains. See items that cost the government thousands of dollars going for pocket change. Act now. Cash in on government surplus. Send 25c for your copy.

KARL ORT, Dept. AM-2, THOMASVILLE, PA.

FREE SAMPLE OF
"The SECRET KEY"
that has made
MILLIONS IN MAIL ORDER
An open letter to anyone who wants to make MORE MONEY with LESS EFFORT!

• **Dear Friend:**

If you're like most people, you have always dreamed of "some day" starting and owning a nice little Home Mail Order business, so that you can quit knocking yourself out day after day, with no **real** money to show for it.

"What a relief," you have thought. "Just to pick up orders and money at the Post Office, with almost nothing else to do but spend your profits." No traveling. No hard selling. No night work.

And you want to know something? That's **exactly** the way a Mail Order Business **can be,** under the right circumstances. I am doing it myself. I've helped other ambitious men and women to do it. And I'll help you, if you'll let me.

• **START NOW — NO EXPERIENCE REQUIRED**

I'm not talking about a long winded book on "Mail Order Methods", or a "Course of Study" that will take you a year to digest and still leave you up in the air! You've answered ads like that, I am sure . . . only to be disappointed and perhaps even annoyed that they **promised so much,** and turned out to be of such little practical value.

No . . . I'm not trying to educate you. My purpose is to **set you up in a profitable Mail Order Business** . . . not next year or next month, but **right now** so you can start making money the **same way I do.** A way that has brought me security and financial independence.

• **THE SECRET KEY THAT HAS MADE MILLIONS**

The heading on this ad mentions what I call the "Secret Key", and says it has "Made Millions in Mail Order". And that's no exaggeration! It is responsible for some of the most **fabulous successes in history!** There's no room here to explain it . . . but if you show a **sincere interest** by mailing me the Coupon below, I'll send you a **FREE sample** and tell you how to use it . . . to make more money with **less effort** than you have ever imagined, even in your wildest dreams! That's Step No. 1 of my plan to set you up in business.

• **CASH IN ON FOREIGN MADE PRODUCTS (IMPORTS)**

Everybody knows that there is **a fantastic profit** in IMPORTS . . . that items costing 50c or $1 abroad often sell up to $5 and $10 in this Country! But what most people **don't realize** is that importing procedures are **too complicated** for the average person to undertake on his own. **And that's where I come in.**

I am already importing watches, and cameras, and sporting goods and hundreds of other fast-moving items from all over the world . . . Now you can do the same without **experience** or previous **importing knowledge!** My secret Key Plan is an airtight Program, all laid out for you ready to go. I make everything **available** to you at once! You do not advertise; you do not prepare advertising literature of any kind. You do not invest in merchandise or inventory. You do not **even handle** the imports that you sell so easily, by mail to the public. About all **you have** to do is go to the Post Office for your mail, then to the **Bank** with your **profits.** That's Step No. 2 of the Program I offer you.

• **EXCLUSIVE FRANCHISE IF YOU ACT NOW AND CAN QUALIFY**

Once you **start** making money in this exciting way, you'll want to make sure it will last . . . so my 3rd and **final** step is to offer you an opportunity to have an **Exclusive Franchise** to hold as long as you qualify. With this Franchise as protection you may make **more,** and **more,** and **MORE.** Start as small as you wish at home, build a big business requiring a special building & dozens of employees, if that is your ambition.

My own beginning was made with about $50 capital, and no help from anyone (such as I now offer you). Today my sales by mail have long since passed the **million dollar mark.** I own a big home and my own business building, drive to work in a Cadillac, pay out thousands of dollars a month to employees. And every penny of this came from **mail order profits.**

So you see, my "Secret Key" is not an untried idea or a pipe dream. It is a proven, practical **money maker** that **you can use** just as I do, perhaps to take in more money every day than you could reasonably expect to make in a month by personal, face-to-face selling . . . no matter how good you are, or how good your product.

• **NO INVESTMENT IN MERCHANDISE**

Let me repeat what I stated above . . . that **you don't have to invest even one penny in merchandise.** Just follow my detailed plans for use of the "Secret Key". If you ever find an **easier way** to make money at home, I hope you'll tell me so I can join you. In the meantime, I hope you'll start my way, for it's the easiest I've seen or heard of up to now!

Airmail the Coupon **today sure.** Only a limited number of Exclusive Franchises are available. I'll see that you get the FREE sample of the "Secret Key" along with complete details of my **Entire Secret Key Plan** immediately. No cost or obligation. Just fill out and mail the Coupon NOW! You will **always** be glad you did!

Cordially yours Nels Irwin
NELS IRWIN

For a FREE SAMPLE of my "SECRET KEY"

Print Your Name and Address

NAME_____

STREET_____

TOWN_____ ZONE___ STATE_____

MAIL TO: **NELS IRWIN, Dept. B-372**
MAIL ORDER DISTRIBUTORS.
15201 S. Broadway, Los Angeles 61, Calif.

Rochester, N. Y., sells rr. passes 1880-1930, incl. n.g., shortlines, elec.

TOM MINARD, 1205 S. 4 St., St. Charles, Ill., will sell newspaper pix of Shays.

JOHN MOFFET, Box 101, Oxford, N. Y., buys NYO&W, DL&W tts., emp. tts., rulebooks, etc.

D. C. MOORE, 5618 Dorbrandt St., Houston, Tex., sells back issues Railroad Magazine, Trains, rr. books. (SAS)

ED. MORAN, 3300 Netherland Ave., Bronx, N. Y., sells back issues Railroad Magazine, Mod. RR. C.

AKIHIRO NAKAMURA, 2-569 Kamiochiai, Shinjiku, Tokyo, Japan (age 17), wants pen pals. Interested in AT&SF, GN, others rrs. (Reads English.)

DAVE NESTLE, 81 Hill St., Greenwich, N. Y., buys, sells headlamps, markers, tts., lanterns, tkts., passes, railroadiana. (SAS)

KEN NIMS, 108 Cushing Ave., Dorcester, Mass., trade or sell many B&M emp. tts. (1928-'58), B&M and MeC rulebooks.

R. V. NIXON, Rte. 4, Rattlesnake, Missoula, Mont., disposing of collection 30,000 tr. orders, many old. Will give some free to everyone sending stamped addressed env. while supply lasts.

OLIVER OGDEN, 83 Hardy Lane, Westbury, L. I., N. Y., will swap Jamaica Cent. Ry. school tkt. for NY & Queens Ry. tkt.

BENT PALSDORF, Box 184, Copenhagen K, Denmark, sells European rr. books, mags., pix; model rr. equip., all gages.

C. G. PARSONS, 2137 Niskayuna Dr., Schenectady, N. Y., will trade for 35mm slides NOPS, EPCL.

AL PATERSON, 451 Maplehurst Ave., Oakville, Ont., Canada, sells CNR, CPR action and still pix, size 8x10. No list.

DICK PEDLER, 2125 Maffett, Muskegon, Mich., will buy or trade for sharp pix PRR 0-6-0, 2-10-4.

DAVID PLOWDEN, 1239 Madison Ave., New York City, sells pix Sydney & Louisburg, CV, CNR, CPR, GN, DL&W, CNJ, Rut., B&A, suitable for framing, size 5x7, $1.25, 8x10 $2.50, 11x14 $5; no other sizes.

JOE QUINN, Box 24, Tillson, N. Y., buys, sells steam negs., all rrs.

BRUCE ROBERTS (Pennsy brakeman), 1138 Seneca St., Erie, Pa., has 8mm movies (PRR-NYC) taken from diesel on frt. runs; sell or swap for PRR steam 8mm.

J. E. RONAN, 17203 112 Ave., Nunica, Mich., sells back issues Railroad Magazine, Trains, model mags. Will sell interurban communication bell.

HAL ROSOVE, Box 69, Irvington, N. J., wants any size Camelback pix from any rr.

DICK SAMUELS, 2215 Harrison, Milwaukie, Ore., buys, trades, sells switch keys. Wants to correspond with other collectors.

CARROLL SANDERS, 4614 Berkeley St., Harrisburg, Pa., wants to hear from collectors of railroadiana, esp. tr. orders, who'd like to join club.

JIM SCRIBBINS, 3610-A S. Howell Ave., Milwaukee, Wis., sells CMSP&P emp. tts. (SAS)

HAL SMITH, 105 Pleasant St., Concord, N. H., wants histories B&M, New England rrs., trolleys, rapid transit.

K. M. SMITH, 758 Maple St., Fostoria, O., sells color p.c.'s Manistee & NE caboose 17.

D. T. SPRATH, Box 95, Monroe, Wash., wants emp. tts., tr. orders GN Cascade, Spokane, NP Tacoma, CMSP&P Coast-Columbia divisions.

ELLIOTT STEWARD, Norway, Maine, will buy mid-30's Loco. Cyclopedia, good cond.; write first. Also tkts. Monson RR.

WARREN STOWMAN, 2011 W. Godfrey Ave., Philadelphia, Pa., will trade for or buy any size pix Pa., Poughkeepsie & Boston 4-4-0 No. 1, P&R 1200, 145.

PAUL STRINGHAM, Box 743, Peoria, Ill., sells Ill. Term. tts., emp. tts., railroadiana from other elec. and steam rrs.

DON SYWASSINK, 205 Garland, Davison, Mich., sells emp. tts. '45-'53, major rrs., shortlines.

TED TAETSCH, 14218 Garfield Ave., Lakewood, O., buys, trades 3x5 trolley pix.

TONY TIEULI, 159 Hichborn St., Revere, Mass., buys pix MTA types 4, 5, PCC. Sells, trades size 828 pix. (SAS)

CORNING TOWNSEND, 3 Clarendon Pl., Buffalo, N. Y., will sell 17 diff. rrs.' books of rules from '18. (SAS)

DON VAN COURT, 13 Garden Pl., Chathem, N. J., trades M&E tkts. for rr. or trolley emp. uniform buttons.

A. VON BLON, Box 122, Bu Sta., Waco, Tex., sells rr. books.

HELEN VON BLON, Box 6422, BU Sta., Waco, Tex., will sell OW, RR&N, UP emp. mags for '20's.

DAVE WALTER, 413 Lawrence Rd., Havertown, Pa., wants RDG steam, diesel pix esp. on Perkiomen, Wilmington, Newton branches.

A. R. WARD, 71 Chadwick St., Paterson, N. J., wants pix TARS cars sold to other systems. Sells, trades trolley, steam, diesel, jumbo size pix.

G. T. WAUGH, Box 247, Gambier, O., publishes RR. News Digest (formerly Best RR Data) monthly. Sample 25c, $2 a year.

P. A. WEIBLER, 711 W. Florida, Urbana, Ill., wants pix, negs., data on C&NW, GMSP&O, streamlined steam, any rr., pix, info. Quincy, Omaha & KC.

MARVIN WEISS, Box 1, Metropolitan Station, Brooklyn, N. Y., sells transfers, U.S. and Canada.

FRED WENDHOLT, 2225 Cleveland St., Terre Haute, Ind., wants Bedwell's novel, "The Boomer." (Ed. note: so do a lot of other guys, but apparently no one wants to sell a copy of that rare book.)

L. A. WHYTE, 115 Anndale Dr., Willowdale, Ont., Canada, sells steam, diesel, trolley pix on approval to serious collectors.

GORTON WILBUR, 41-96 Gleane St., Elmhurst, L. I., N. Y., wants steam recordings, esp. New Eng.; also pix New Eng. locos, trains, stations, etc., 1880-1930.

DICK WONSON, 263 Belmont St., Fall River, Mass., sells trolley pix, New Eng., South, Midwest. (SAS)

JIM WOZNICZKA, 11055 S. Ave. B, Chicago, Ill., wants European pen pals, esp. in England. Swaps diesel, steam, elec. pix.

JIM WYNN, 101 Bridge Ave., Forest Pk., Ga., sells 8x10 pix.

WALLY YOUNG, 64 Crescent Rd., Toronto, Canada, sells, swaps trolley trfs., pix; wants streetcar pen pals. Answers all mail.

PAUL YURKO, 34-18 Broadway, Astoria, L. I., N. Y., wants action and still shots NYC 4-8-4 steam locos. Write details first.

LYNN ZELMER, 3715 Kerrydale Rd., Calgary, Alta., Canada, wants tts., emp. tts., railroadiana, pix, etc., any rr., esp. UP, CPR, CNR. •

Model Trading Post

H. R. ASHLEY, 50 Saratoga Ave., Yonkers, N. Y., wants Ives, Lionel, etc., st.-gage, wide-gage toy elec. trs.

GORDON BROOKS, Douglas Ave., Oakhill, Stroke-on-Trent, England, trades new British H0, 00, 0 gage locos, dinky toys, etc., for new Amer. H0 gage equip.

TED CRANFORD, Box 457, Colton, Calif., will sell AF tr. set excel. cond. (SAS)

BOB ESCHENBERG, Rt. 1, Box 117, Plainfield, Ill., will sell 4'x8' H0 gage layout, locos, cars, mags. (SAS)

MARLIN KOCH, 5 Main St., Joliett, Pa., sells Railroad Magazine, model mags., Trains; Lionel, AL items. (SAS)

J. KOWALSKI, 2300 W. 21 St., Chicago, Ill., will sell Lionel locos 158, 256, 154.

J. LAUGHLIN, 33-R Winthrop, Rehoboth, Mass., will sell steam and gas park-size trs., tracks. Pix, details $1.

DAVE OSBORNE, St. Martins, St. John County, N. B., Canada, will sell Lionel 0 gage pass. car or trade for Li. 027 gage frt. cars.

ARMOND PREMO, Box 134, Enosburg Falls, Vt., wants any size pix RUT 17, 22 2-8-0's.

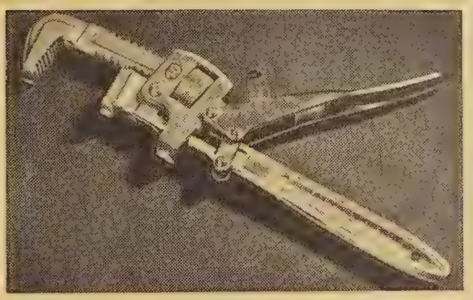
AL STAUTER, Box 57, Leroy, O., wants rr. calendars, artwork. Pays cash or trades scale 0 gage locos, equip.

WELLBORN, Box 1690, Ft. Worth, Tex., will trade 0 gage equip. for H0 or stamp collection. List free. (Ed. note: this department prefers first names or first initials as well as last names.) •

Men's Mart

All products shown here may be obtained directly from indicated sources. Send check or money order with your order. Manufacturer will refund full purchase price on prompt return of unused, non-personalized items. This department is not composed of paid advertising.

INITIALS on these beautifully made cuff links and tie bar are a great conversation opener. Salesmen, in particular, will find them useful. Initials stand for—"You can't do business sitting on your . . ." You should be able to finish it. Silver or gold finish. Set, $3.95 ppd. Park Galleries, Dept. AR-12, 103 Park Avenue, New York 17.



NEW GRIP WRENCH—the first clamp wrench ever made—it's a remarkable tool. Clamp at side locks wrench head with 2,000 lbs. gripping pressure. Fine as lock or pipe wrench, clamp or portable vise. Made in Germany, measures 10". Jaws open 4". A buy for $2.95 ppd. Lee Products, Dept. A1, 103 Park Avenue, New York 17, N. Y.

WOOD dolls imported from Japan make an ideal holiday gift. Each figure, delicately hand painted and carved, fits inside the other—for nest of 3. The children love 'em. Makes a handsome addition for desk or shelf. Sizes: 3⅛", 1⅜" and ½". Set of 3 dolls is $1.98 ppd. From Arkay Products, Dept. A-1, Box 2838, Grand Central Station, N. Y. 17.

TIME-TELLER TICKS accurate hours for happy owner of this precision-made chronograph. Measures distance, speed of moving objects. What's more, it's a stop-watch! With rugged. shock-resistant case, radium hands and numerals and sweep hand. Tempting beauty comes with instructions and band for $8.95 ppd. Cryder, Box 79-C11, Whitestone 57, N. Y.

HODGMAN'S insulated boot foot wader is completely waterproof and designed to keep in heat, cold out. Has large outside pocket with snap button flap, take up straps and suspender buttons. (Suspenders not furnished.) In olive drab. Sizes: 6 to 12. Available for $39.90. For information write to: Hodgman Rubber Company, Framingham, Mass.

FAST AND SHARP, these stiletto knives really do the job. Easy to handle, comes in handy for camping excursions. Beautifully made by Japanese craftsmen. Small one above has 3¾" blade; larger, 4½" blade. Extremely sharp cutting edge. $4 and $5 respectively. Both ppd. Many uses. Order from Best Values, Dept. K-10, 403 Market, Newark, N. J.

AIR RIFLE, imported from Europe, shoots .177 pellets and darts. Fine people who have rifle, say it's powerful enough to take small game. Made by old world gunsmiths, has accuracy for target shooting. Hand-rubbed stock. Rifle, $10.95; pellets, 1,000 for $3.98; darts, 72 for $2.69. ppd. Empire Mdsg. Co., Dept. AR, 4 N. 3rd Ave., Mt. Vernon, N.Y.

You don't *have* to have talent to draw! Yessir, simply focus Magic Art Reproducer on any subject and follow the lines of the "picture image" reflected on paper. Then draw to your heart's content. Reduces and enlarges. Easy to follow for reproducing actual colors. Fun and entertaining. $1.98 ppd. Norton Prod., Dept. AD-4 296 Broadway, N. Y.

LOOK! *Amazing Kenya Gems!*

More Brilliant Than Diamonds!

Write today for the ***FREE*** illustrated booklet that tells the full story of these sparkling white Kenya Gems—the glorious jewels that are more dazzling, more fiery than diamonds, and look exactly like fine diamonds. Yes, read all about these marvelous gems—made possible by an exclusive patented formula and crystallized by a secret scientific process.

More Fire! More Brilliance! But Costs Far Less!

The only gem of its kind in the world! Superbly beautiful! Sparkling White! Truly a miracle of modern science! House Beautiful magazine says, "Like a diamond and with more fiery sparkle," Esquire magazine says, "Outdazzles the most dazzling diamond."

Every Kenya Gem is a clear sparkling WHITE jewel. It is not hazy—not canary—and not yellowish. It is the only known scientific gem that has the sparkling whiteness of a fine diamond. Our free booklet shows actual photographs of Kenya Gems in smartly styled gold mountings.

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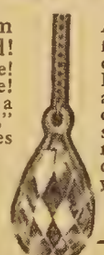

Actually only a small fraction of the cost of a diamond. A large 1-carat Kenya Gem costs only $39, and our free booklet shows distinctive men's rings and stylish ladies' rings, earrings and pendants in any carat size and style of cut you wish. Very easy payments if you like.

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Please send me the FREE illustrated booklet telling all about Kenya Gems.

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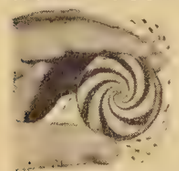
Men's Mart

$6.95

.22 Cal. NEW 7 SHOT REPEATER AUTOMATIC. The skilled hands of the German gunsmith is responsible for this .22 Caliber 7 shot repeater automatic with self-ejecting empty shells, loads from bottom of handle. Just 4 inches long, fits easily into pocket or purse. Ideal for sporting events. Stage use (Not available to Calif. residents). Not a lethal weapon. Money back guarantee. Comes for $6.95 from Best Values Co., Dept. F-75, 403 Market St., Newark, New Jersey.

NEW— POCKET SIZE INVENTION HELPS HYPNOTIZE YOURSELF or OTHERS IN MINUTES!



MUST WORK OR MONEY BACK!

Hold the HYPNO-COIN in front of the person you want to hypnotize. Gently vibrate the plastic lense. This sets a whirling hypnotic pattern into motion that is so fascinating, it captures and holds your subject's gaze. Now give your hypnotic suggestions! Get this amazing hypnotic aid complete with a FREE revealing booklet of secrets and instructions that tell you what to say and do, how to command and re-hypnotize with the snap of a finger, how to thrill and amaze them with hypnotic stunts, etc. Get the COIN, Booklet and Stand for Self Hypnosis — only $1.00 ppd. Sent in a plain wrapper. Money back if not delighted!

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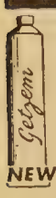
LURE FISH BY SMELL



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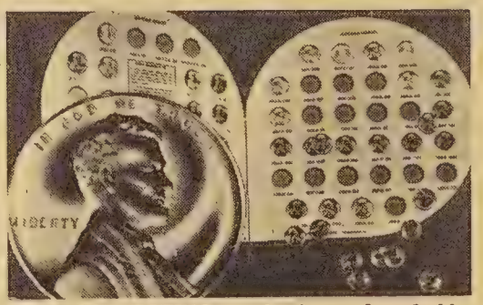
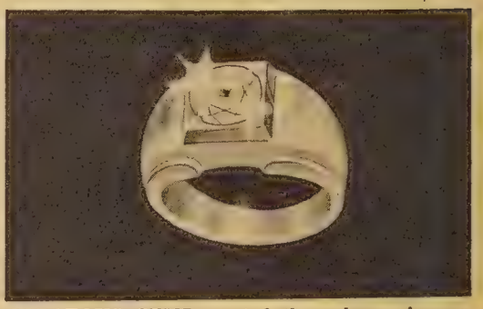
NEW

NORKIN LABORATORIES, Dept. AMG-30N
809 Wyandotte, Kansas City, Mo.

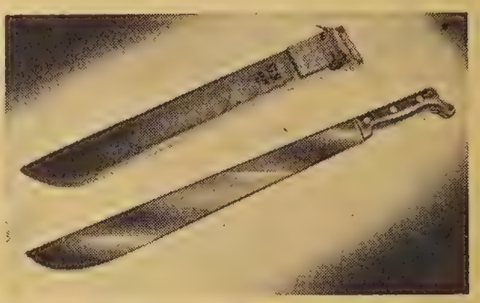


COIN COLLECTING can be fun *and* profitable. This Lincoln penny album could be worth $35 or more when properly completed. Fill spaces with 59 pennies (dates and marks found in album) as you find appropriate pennies. Full information is sent with first album. $1 ppd. Hobbies Unlimited, Box 97, Dept. AG2, Oakland Gardens Stat., Flushing, N.Y.

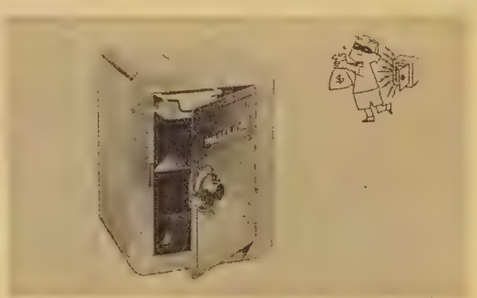


GORGEOUS GEMS created through man's own scientific ingenuity! Clear, sparkling, white Kenya gems are actually easy on the purse strings. A large 1-carat gem costs only $39. Smartly styled men's and ladies' rings set with any carat size. Beautiful. Easy payment terms. Write for free illustrated booklet. Kenya Gem Corp. Dept. A, Phila., Pa.

WE'RE not suggesting you do it, but if your wife insists on going shopping and spending all the family coin, these *will* keep her home. Made during WW II for U. S. Navy at cost of $12, heavy black steel hand and leg irons are connected by rugged chain, have saw-tooth catch. Brand new surplus. $4.95 ppd. Kline's, 333-D East 50th St., N. Y. 22.



YOU don't have to cross the border to get one of these 18" blade machetes. War surplus (Army made 'em for use in tropics), you can bush out a trail, clear a camp site, or fell a good-size tree with one of 'em. In sturdy green canvas shield with belt clip. $2.95 ppd. Arms & Weapons Dept. A-4, 49 East 41st St., New York 17, N. Y.



STORE cash, papers, etc. in Mosler Junior Safe Vault. Measures 6"x7"x9". Has battery operated alarm with a secret shut-off, and your own secret combination. Comes complete with two draw string money bags for storing bills and coins, cash drawer and handy shelf. $4.95 ppd. Mailtime, 126 Vanderbilt Ave., Dept. AE-1, B'klyn 5, N.Y.

Serve with distinction from this handsome bar adorned with your initials for that personal touch. Made for indoors and outdoor use. Stain resistant top. Sturdily built of aluminum and wood grain finished Multi-Flute fibreboard. Built-in shelf for bottles, glasses and napkins. $5.98 plus 63¢ shipping charge. S. J. Wegman, Dept. BR77, Lynbrook, N.Y.

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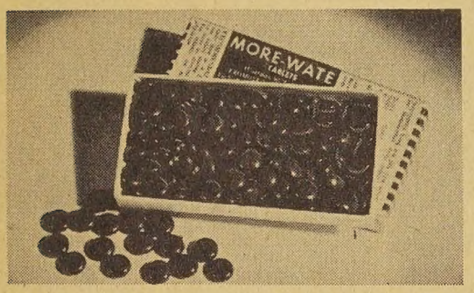
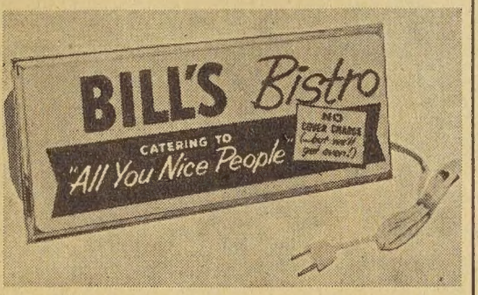
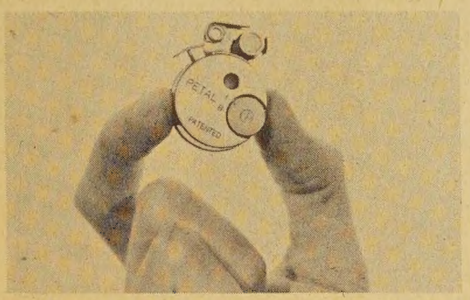


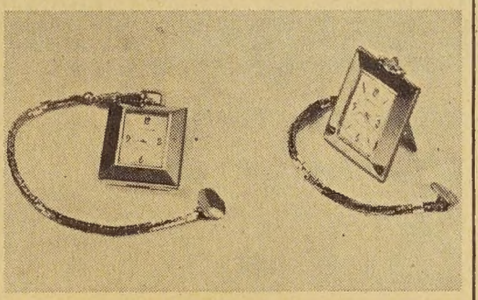
GAIN WEIGHT with fast-acting tablets. Combines 4 aids to gaining, according to folks who handle these tablets. They tell us it helps your food to add new pounds to arms, chest, hips, thighs and legs. So, if you desire to add to your manly physique, you get 1-month's supply for $3 ppd. More-Wate Co., Dept. M-426 403 Market, Newark, N.J.



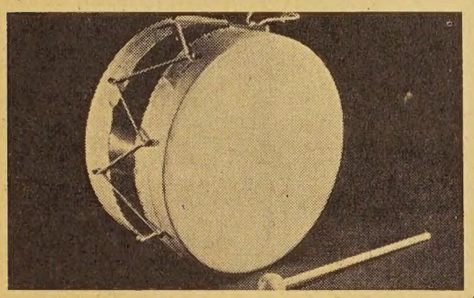
HOME-bar sign lights up parties. Just plug in 6 ft. cord. In 3 styles: (a) one above; (b) Bar, Excellent Cuisine (The Food's Good, Too), No Tipping —We Get It In Other Ways; (c) Café, Internationally Wreckommended, No Substitutes In Menu—In Fact, No Menu. State style and one name. $11.95 ppd. Spencer, Spencer-A Bldg., Atlantic City, N. J.



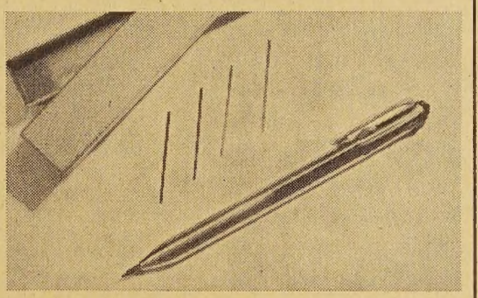
TINY PRECISION CAMERA shoots 6 exposures. "Petal," smaller than 50 cent piece, features fine-ground lens, single action shutter, eye-level view finder, fixed focus. All steel construction. Film readily available. Makes a terrific gift. Comes with free roll of film. $3.98 ppd. Big Three Enterprises, Dept. A, 1109 Sixth Ave., N.Y. 36.



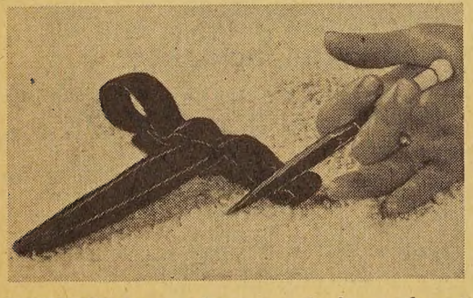
POCKET AMBASSADOR is a modern lapel watch, *but* remove it from pocket, lift up easel—and presto—you have a decorative desk clock. Made in Switzerland by Heritage, it's shock protected, anti-magnetic and guaranteed for 1 year. Comes packed for gift giving. Smart gift. $17.95 ppd. Douglin Designs, Box 147A, West Hempstead, N.Y.



TOM-TOM DRUM beats out hours of fun. Beautifully made with calf skin, this durable drum is double-headed. It's a generous 5" x 9" in size. Perfect for frustrated guests, and the youngsters love $4.95, plus 50¢ for shipping. Florida Imports, to join in the fun, too. Comes with mallet for Dept. A, Buckman Bldg., Jacksonville 2, Fla.



AUTOMATIC 4-color pencil has 4 plastic spring slides that retract or eject the color you want. It retains its beautiful silver finish for a lifetime. Writes in red, green, blue and black. Takes standard leads and has screw type lead adjustment. Comes individually gift boxed for $2 ppd. From Hollis Co., Dept. AR2, 1133 Broadway, N. Y. 10.



DESIGNED by an adventurer who knows the art of self defense, rare leg stiletto makes unusual and practical gift for your wife, daughter or favorite girl. With sword handle and Solingen steel blade. Measures 5⅝". This slim beauty comes in black or red velvet sheath on garter. $5.98 ppd. World-Wide Treasures, Dept. AR, Box 271, Lockhaven, Pa.

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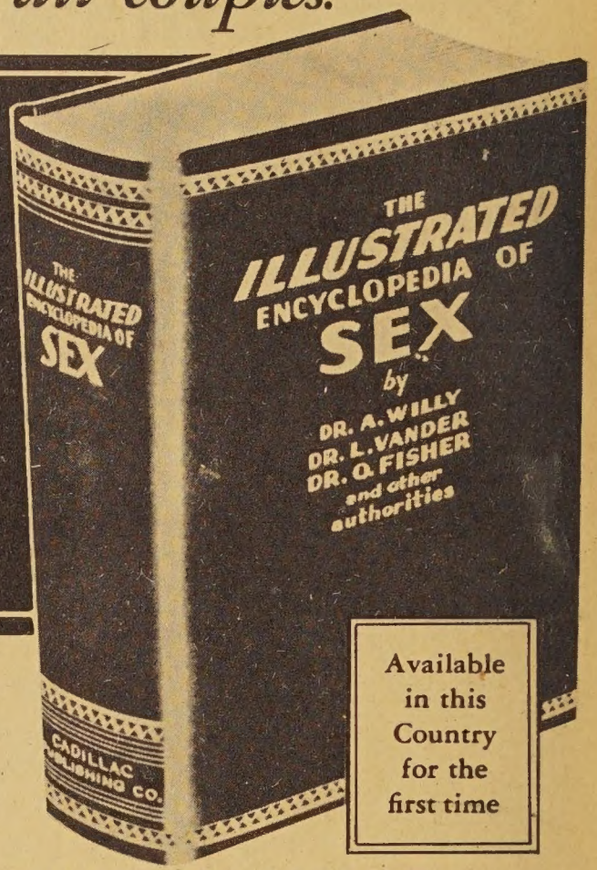

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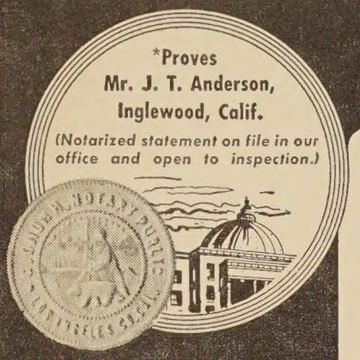

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